REPORT RESUMES

ED 021 132 08 VT 005 833

EFFECT OF AN INTEGRATED INSTRUCTIONAL COUNSELING PROGRAM TO IMPROVE VOCATIONAL DECISION-MAKING OF COMMUNITY COLLEGE YOUTH. FINAL REPORT.

BY- RYAN, T.A.
OREGON STATE UNIV., CORVALLIS
REPORT NUMBER BR-5-0154 PUB DATE FEB 68
CONTRACT OEC-6-85-065
EDRS PRICE MF-$0.75 HC-$6.68 165P.

DESCRIPTORS- BEHAVIORAL COUNSELING, GUIDANCE COUNSELING, GROUP COUNSELING, VOCATIONAL COUNSELING, *COMMUNITY COLLEGES, *COUNSELING INSTRUCTIONAL PROGRAMS, OCCUPATIONAL INFORMATION, *OCCUPATIONAL CHOICE, *OCCUPATIONAL GUIDANCE, *PROGRAM EVALUATION, COUNSELING EFFECTIVENESS, EXPERIMENTAL PROGRAMS, CONTROL GROUPS, SIMULATION, EXPERIMENTAL GROUPS, REINFORCEMENT, INSTRUCTIONAL PROGRAMS,

A PLANNED VOCATIONAL GUIDANCE PROGRAM INCORPORATING INSTRUCTIONAL AND COUNSELING COMPONENTS IN A COMMUNITY COLLEGE SETTING WAS EVALUATED. THE PRIMARYPURPOSE OF THE PROGRAM WAS TO IMPROVE OCCUPATIONAL CHOICE-MAKING OF POST-HIGH SCHOOL YOUTH. THREE HUNDRED COMMUNITY COLLEGE STUDENTS WHOSE VERBAL AND QUANTITATIVE SCORES ON COLLEGE ENTRANCE EXAMINATIONS FELL BELOW THE 50TH PERCENTILE AND WHO HAD NOT MADE FIRM VOCATIONAL CHOICES WERE INCLUDED IN THE STUDY. A POST-TEST CONTROL GROUP DESIGN WAS IMPLEMENTED WHICH INCLUDED ACTIVE AND INACTIVE CONTROL GROUPS WITH SUBJECTS ASSIGNED RANDOMLY TO FIVE DIFFERENT TREATMENT CONDITIONS. RESULTS SUPPORTED THE MAJOR HYPOTHESES--(1) REINFORCEMENT COUNSELING TECHNIQUES ARE EFFECTIVE FOR IMPROVING STUDENTS' VOCATIONAL DECISION-MAKING, (2) REINFORCEMENT COUNSELING TECHNIQUES ARE EFFECTIVE FOR HELPING STUDENTS ACQUIRE KNOWLEDGE OF SOURCES OF PERSONAL DATA AND OCCUPATIONAL INFORMATION, (3) SIMULATION MATERIALS ARE EFFECTIVE IN IMPROVING STUDENTS' VOCATIONAL DECISION-MAKING, AND (4) SIMULATION MATERIALS ARE EFFECTIVE FOR HELPING STUDENTS ACQUIRE KNOWLEDGE OF SOURCES OF OCCUPATIONAL INFORMATION. THE EXPERIMENTAL PRORAM WHICH INCORPORATED TESTING, COUNSELING, AND OCCUPATIONAL INFORMATION SERVICES IN A COORDINATED PACKAGE WAS FOUND TO BE EFFECTIVE FOR IMPROVING OCCUPATIONAL CHOICE-MAKING OF COMMUNITY COLLEGE YOUTH. AN EXTENSIVE APPENDIX INCLUDES DATA, A TYPESCRIPT OF A COUNSELING SESSION, INFORMATION-GATHERING INSTRUMENTS, AND OCCUPATIONAL INFORMATION. (ET)

ED021132

FINAL REPORT

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February 1968

U. S. DEPARTMENT OF
HEALTH, EDUCATION AND WELFARE

Office of Education
Bureau of Research

VT005833

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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T. A. Ryan

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The research reported herein was performed pursuant to a grant with the Office of Education, U. S. Department of Health, Education and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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ACKNOWLEDGMENTS

The project director acknowledges with thanks the cooperation and support given to this study by the administrative and research staffs of the School of Education, Oregon State University and the administrative, instructional and counseling staffs of Blue Mountain Community College. Dr. Richard Bloom, Dr. Clay Brittain and Dr. Richard Otte served as U. S. Office of Education Project Officers for this research.

Sincere appreciation for the splendid support and cooperation given to this project over a two-year period is expressed to Wallace W. McCrae, President, Blue Mountain Community College, Robin Woodroofe, Business Manager, Blue Mountain Community College; Robert E. Hawk, Dean, Applied Sciences and Technology, Blue Mountain Community College; and Truman A. Baily, Registrar and Director of Admissions, Blue Mountain Community College. The director is especially cognizant of the contribution made to this project by Donald Amsberry, Harold Marston, Norman Vorvick and Claude Heyer, counselors at Blue Mountain Community College, implementing the counseling role in the study. In every respect these men demonstrated commitment to professional goals of counseling, dedication to vocational education and desire to implement scholarly research. To these men the director is particularly grateful and expresses sincere thanks.

The director expresses special thanks and appreciation to Anita Whittle and Lydia P. Mix for assistance with data treatment and revision of project materials following completion of the research phase of the project. Thanks also are expressed to Dr. Wm. G. Loomis, State Director of Vocational Education, who endorsed the proposal for the investigation.

SUMMARY

This study was concerned with evaluating a planned vocational guidance program with instructional and counseling components in a community college setting. Primary purpose of the program was to improve occupational choice-making of post high school youth. The investigation tested effects of reinforcement group counseling techniques on vocational decision making and evaluated simulation materials for vocational guidance of community college youth. Regular counseling staff implemented counseling role in the study. Reinforcement counseling and simulation materials were primary independent variables. Vocational decision making and knowledge of sources of personal data and occupational information were major dependent variables. A posttest control group design was implemented including active and inactive control groups with Ss assigned randomly to treatment conditions. Analysis of variance was used to test major hypotheses. Control over learning variables and initial differences was achieved through restricting population to students scoring below fiftieth percentile on college entrance tests and enrolling all Ss in a common core program. Results supported major hypotheses. Reinforcement counseling techniques and simulation materials were found effective for improving students' vocational decision making. The vocational guidance program found to be most effective implemented reinforcement counseling techniques and simulation materials in an integrated instruction-guidance approach.

PREFACE

This project demonstrated effectiveness of a vocational guidance approach for community college youth. It is the firm conviction of the project director that success of the study extended beyond the significantly positive findings indicating effectiveness of the experimentally tested guidance program. It is felt that an equally important outcome from the study was the practical demonstration of the relation between educational improvement and school climate.

To carry out this project it was essential to have an educational climate which fostered improvement and excellence, with a school staff committed to involvement in evaluating and modifying existing programs, planning and conducting new ones. Blue Mountain Community College had both educational climate and staff commitment essential to successful conduct of this project. Throughout the duration of the project there was evidence of total commitment of faculty and administration to quality education geared to needs of the community.[6] The approach which was introduced on an experimental basis was continued as part of the school guidance program, evidence of a total educational climate which fosters and facilitates adoption of tested educational innovation.

I. Introduction

A. Problem

This study was concerned with evaluating a planned vocational guidance program incorporating instructional and counseling components in a community college setting. Primary purpose of the guidance program conducted under experimental conditions was to improve occupational choice-making of post high school youth. The investigation was designed specifically to test effects of reinforcement group counseling techniques on vocational decision-making of community college youth and to evaluate simulation materials for vocational guidance of community college youth.

This study developed out of a background of general concern over the need for youth to make realistic vocational decisions, and recognition that the school holds a responsibility for helping youth develop sound educational and vocational plans. The problem of inadequate, unrealistic vocational decision-making by post high school youth had been gaining in scope and focus, as career-related decisions required of individuals in an industrial urban society were growing in complexity and increasing in number. The extent of inadequate, unrealistic decision-making by youth in the United States since 1960 was documented by surveys of dropouts, records of delinquency, and reports of employers. The critical nature of this problem was suggested by inclusion of career development in the U. S. Office of Education 1965 list of priority problems.

In the early 1960's educators, social and behavioral scientists and government agents were pointing to the need to help students develop adequate, realistic decision-making behavior. Wolfbein (1963) in noting that a forty percent increase in job entrants was predicted for the 1960's compared to the 1950's, concluded that youth should be prepared educationally for making occupational choices and entering the labor market. On the basis of an inventory of characteristics of young people leaving high school for full-time jobs, Perluss (1963) reported that too few possessed sufficient sense of direction, too few had enough knowledge about the world of work; too many lack basic communication skills of reading, spelling, writing, and arithmetic; too many lacked incentive; and too many had unrealistic goals, inadequate, vague ideas of what to expect after high school. In considering the vocational guidance needs for a changing world Wrenn (1965) stressed the need for helping youth to be prepared for making realistic vocational decisions over the span of career development, observing that youth of 1965 would change jobs five times during their work career. Studies of the general nature of occupational decision-making suggested a close relationship between work and leisure activities. Havighurst (1965) noted that not only would people have to be able to withstand change in the occupational world, but also would have to be able to make related choices for use of their time in non-work activities.

Despite consensus that youth should be prepared to implement vocational decision-making and educational planning over a span of two to three decades of career development, there appeared to be a lack of information on how to accomplish this goal. There seemed to be agreement that to make sound career decisions youth need to be able to gather relevant information about themselves, the world of work, and educational and training programs. Youth need to be able to relate information about themselves to information about occupational opportunities and to weigh alternatives, considering consequences of competing choices in arriving at vocational decisions and making educational plans.

Concomitant with a growing concern over the need to help youth develop sound vocational decision-making behaviors there was a growing recognition that education had a primary responsibility for achieving this goal. In 1965 the Secretary of Educational Policies Commission (Russell, 1965) observed that education has a role in helping to prepare youth for the world of work, noting that a central role of education was in developing students' rational potential and theoretical insight and developing their basic strategies of inquiry and realistic decision-making. Following recommendations of the Panel of Consultants and passage of the Vocational Act of 1963, it was conceded generally that the school should prepare students to accept change, to be ready psychologically to change. It was recommended that efforts be made to teach youth how to make considered occupational choices in terms of professions, technologies, or service activities in relation to individual characteristics and chances for success and satisfaction (Hansen, 1963). As educators accepted responsibility for teaching youth vocational decision-making, the need for effective teaching strategies and intervention programs was recognized.

The problem was one of developing strategies and programs to implement the responsibility for helping youth become proficient in vocational decision-making and educational planning. The vocational guidance program conducted at Blue Mountain Community College, Pendleton Oregon from 1965 to 1967 as a research study aimed to test experimentally effectiveness of an approach intended to answer the question, "What can a post-secondary school do within limitations of resources and practical considerations to help students develop and practice sound vocational decision-making?"

B. Background

Three situational factors undergirded development of the community college vocational guidance project. There was concern in the School of Education research unit at Oregon State University over the need to identify viable vocational guidance programs for post secondary school youth. The State Department of Education was interested in improving vocational guidance for Oregon youth. The administration and board of Blue Mountain Community College, Pendleton, Oregon were intent upon developing programs and approaches to come to grips with the complex attrition problem in the community college. Two factors were predisposing to the research interest in this study: (1) Counseling and vocational education constituted primary research areas of the School of Education at Oregon State University. (2) Preparation of community college teachers and development of vocational programs were primary responsibilities of the School of Education under functional allocation of institutional responsibilities by the State Board of Higher Education.

Concern of the Blue Mountain Community College Board and administration over attrition led to development of a preparatory and developmental program aimed at combatting forces which apparently were related to student failure in post-secondary school programs. The developmental program was predicated on an assumption that despite commitment of Oregon post-secondary schools to developing to the fullest extent potentials of young men and women, the community college "open door policy" with resultant heterogeneous population tended to militate against realizing this aim. With support from the community advisory committee a program for the potential dropout, designed to be developmental rather than remedial, was initiated in 1964. Students enrolled in the program, identified on basis of entrance test data, were characterized by deficiencies in basic knowledge and skills, lacking in effective study habits and inadequate or unrealistic in their vocational choices. Evaluation of the developmental program at Blue Mountain Community College in 1964-65 suggested viability of integrating instruction and counseling functions. The developmental program was intended primarily to help students increase basic knowledge and skill proficiency, improve study habits, and increase in self-understanding.

It was felt that students still needed additional help in arriving at sound vocational decisions and making educational plans.

It was agreed that to some degree the dropout problem would be further alleviated if students were helped to improve their vocational decision-making. Marshalling of forces from Oregon State University School of Education research interest in vocational education and guidance, the State Department of Education support for improving vocational guidance, and the Blue Mountain Community College concern over post-secondary school attrition culminated in the design of a vocational guidance program aimed specifically at improving vocational decision-making of post-high school youth.

At the outset it was agreed that the program would have to meet certain basic criteria: (1) It must be economically feasible and administratively possible to operate. (2) It must be designed especially for potential dropout segment of the community college population--those with learning deficits and without firm occupational choices. (3) It must use experimentally tested counseling techniques and guidance materials appropriate to achieving program objectives. The research project conducted at Blue Mountain Community College from 1965-1967 by the Oregon State University School of Education research unit, with endorsement of the State Director of Vocational Education, was designed to test experimentally a vocational guidance program satisfying criteria of efficiency and effectiveness and offering a solution to the problem of helping post high school youth become proficient in using decision-making skills to make sound vocational choices and educational plans.

C. Related Research

At the time this investigation was undertaken a search of literature revealed a dearth of experimental research on guidance programs designed primarily to improve vocational decision-making of post-secondary school youth. Since 1965 when the Blue Mountain Community College vocational guidance project was initiated there has been an increase in research efforts aimed at identifying viable intervention variables in relation to developing vocational decision-making of high school and post high school youth.

In addition to the classic works of Ginzberg (1952), Super (1957), and Tyler (1958), more recent efforts to study the career development process have been encouraged and supported by the U. S. Office of Education. Ellis (1965) undertook a federally supported large-scale longitudinal study of planned and unplanned aspects of occupational choices of youth. In reporting preliminary findings from the study Ellis (1965) noted that both planned and unplanned factors appeared to be contributing variables associated with career development. Related studies have been made to identify factors affecting career choices of adolescents (Tyler, 1964), to identify determinants of educational-vocational choices (Dale, 1965); and to determine impact of chronic economic distress on adolescent educational and occupational expectations (Rehberg, 1965). These studies attempted to relate the career choice responses of youth to individual characteristics and family background factors, rather than to planned intervention variables. A number of studies concerned with identifying factors relating to career development considered choice of professions, such as teaching (Kuhlen, 1959; Hecklin, 1958; Thorndike and Hagen, 1960) and science (Cooley, 1963; Nordstrom, 1961). Although the studies of career development and factors related to career choices have provided much insight into the general topic of career development and helped to define a frame of reference for career choice studies, they have not provided information relative to viability of techniques and materials for vocational guidance to help students develop vocational decision-making behaviors.

The idea of developing decision-making through counseling and the concept of developing realistic decision-making behavior as a counseling goal were supported in the literature of the 1950's (Ginzberg, 1952; Mathewson, 1955; McDaniel, 1956; Miller, 1955; Rothney, 1958; Super, 1957; Tyler, 1958). However, it was not until the 1960's that behaviorally defined counseling techniques and simulation materials for vocational guidance were tested experimentally. Schroeder (1964), Thoresen (1965), and Krumboltz and Thoresen (1964) studied the influence of behavioral techniques on increasing information-seeking of adolescent students. Under controlled conditions both Schroeder and Thoresen found that behavioral counseling was effective in increasing information-seeking of high school students. An experimental study directly related to the research at Blue Mountain Community College was conducted by Ryan (1964) in a California junior college. In the study male students enrolled in non-transfer exploratory psychology class constituted the population. The class was used as a vehicle to give students a common experiental background providing them with test data on their interests, aptitudes, personality characteristics, and abilities, as well as general information on occupations, occupational opportunities, and educational and training programs. Planned reinforcement counseling on an individual basis was used as primary independent variable to increase vocational and educational decision-making of students. Results of the study revealed that deliberation and decision responses increased when these responses were reinforced selectively by the counselor. Generalization of behavior modification to a non-counseling setting was found. Ryan (1964) concluding that reinforcement counseling was effective in increasing vocational decision-making behavior and that behavior modification transferred to the non-counseling setting, pointed to the need for further research to determine effectiveness of reinforcement techniques in group counseling for improving vocational decision making of youth. The investigation conducted at Blue Mountain Community College was designed to build onto the study of individual counseling for improving vocational decision making (Ryan, 1964). Reinforcement techniques were employed under conditions of group counseling. An exploratory psychology laboratory was utilized as a vehicle for testing and disseminating occupational information.

In addition to the need to identify viable counseling techniques, there was a complementary need to find effective guidance materials. The possibility of using simulation materials to teach decision-making was suggested in the 1960's. The simulation concept, based on related work with simulators and simulation strategies in military science, physical science, and education, gained recognition as findings from research endeavors supported by private and federal grants suggested viability of the materials. Cherryholmes (1965) using a simulated international situation game reported that "attitudinal changes" seemed to occur as a result of simulation techniques. Simulation games were used with varying effects in political science, law, business administration, and educational administration to produce cognitive outcomes and develop skills. Anderson (1964) using simulation techniques to teach decision-making to upper division college students, reported simulation to be no better than case-study approach for developing skills, but felt simulation was more effective in increasing students' interest. Anderson's study suggested that a critical variable in simulation work is the nature of materials.

Efforts most directly related to the use of simulation materials to teach vocational decision-making to community college students were carried out at Johns Hopkins University, Western Behavioral Science Institute, and San Diego County Schools. At Johns Hopkins University, James Coleman, Sarane Boocock and associates were concerned with developing and testing a life career game for junior and senior high school students (Boocock 1963; 1966). Hall Sprague of Western Behavioral Sciences Institute tested various simulation game strategies with junior and senior high school students. In San Diego County, California, a project supported by the U. S. Office of Education, was conducted to develop a career simulation game for sixth graders (Shirts, 1966). Although findings from these studies of simulation materials to teach vocational decision making failed to point conclusively to viability of these materials, there was indication that simulation had potential for guidance purposes, and that further research was needed to identify parameters of effectiveness. The research on use of simulation materials with fifth and sixth graders (Shirts, 1966), involving a career simulation game played by competing teams, although failing to yield statistically significant results, suggested that one aspect of the approach which might have militated against effectiveness was the "game" variable. It was suggested that participants may have become so involved in the competition and game-playing that the primary objective, to teach vocational decision-making, was subordinated. In the research conducted at Blue Mountain Community College this factor was taken into consideration by removing aspects of game-playing and competition. The program was planned so that at the outset a general orientation to vocational decision-making would be given, and students would be told that the purpose of the program was to help them develop skills in making sound occupational choices.

Although the research on behavioral counseling suggested viability of the reinforcement counseling techniques and studies on simulation materials indicated feasibility of introducing these materials into a guidance program, none of the reported studies was concerned directly with testing effects of reinforcement counseling techniques and simulation materials for improving vocational decision-making of post high school youth. The research with which this report is concerned was designed specifically to bridge a gap in information about career choice of youth. The study aimed to identify viable techniques and materials for use in post high school vocational guidance to help youth develop and implement sound vocational decision-making and educational planning.

D. Rationale

This study was predicated on prior career development research indicating relationship between individual characteristics and career choice behavior, and related research suggesting viability of behavioral counseling techniques and simulation materials in developing decision-making. The study attempted to test experimentally a planned vocational guidance program incorporating techniques and materials to develop vocational decision-making of a segment of the school population typically found lacking in sound vocational goals. The rationale undergirding the study derived from a set of assumptions having support from related research and theory.

1. It was assumed that post high school youth with deficiencies in basic skill areas, as identified by SCAT or ACT test

batteries, tend to be either inadequate or unrealistic in vocational decision-making. Support for the assumption was given by data gathered during the pilot developmental program conducted in 1964-65 (Blue Mountain Community College, 1965). Additional support was found in supplementary data collected in connection with the study conducted by Ryan (1964) of vocational decision-making of a California junior college population. Implementing this assumption, the population for the study was confined to students identified as deficient in basic skill areas.

2. It was assumed that the decision making process involves information seeking, deliberating and deciding responses (Gellatt, 1962; Bross, 1953; Chernoff, 1959; Ryan, 1964). Implementing this assumption the intervention program, constituting the primary independent variable for the study, was intended to produce vocational decision-making predicated on prior consideration of relevant information. The criterion of adequate vocational decision-making was defined in terms of the three components, seeking information, considering alternatives and consequences, and deciding in terms of success probability. The criterion test was designed to yield a score reflecting the three decision-making components.

3. It was assumed that reinforcement counseling techniques are effective for developing decision-making behavior of youth in school settings. Support for this assumption was provided by research reported by Ryan (1964, 1964a); Thoresen (1965); Krumboltz and Thoresen (1964); and Schroeder (1964). The effectiveness of using reinforcement techniques in group counseling was demonstrated experimentally by Ryan (1965). Implementing this assumption reinforcement techniques constituted one of the primary independent variables.

4. It was assumed that simulation materials can be used for teaching decision-making. Support for this assumption derived from game theory and simulation research (Boocock, 1963, 1966). Implementing this assumption simulation materials were introduced as one of the independent variables in the study.

5. It was assumed that implementing vocational goals in skilled and technical areas requires background of knowledge in basic skill areas. This assumption was recognized by having all students participating in the project enrolled in a developmental program designed primarily to overcome learning deficiencies. This assumption subsumed that individualizing instruction according to evaluation of student needs, abilities, and interests increases chances

of student success. Enrollment of all students in the developmental program served also to provide controls over intervening learning variables.

6. A final assumption was made that the intervention program constituting the primary independent variable should implement student personnel services, and be economically feasible and administratively possible to operate as a regular vocational guidance program in post-secondary schools. This subsumed related assumption that disseminating information about occupations and administering a testing program are essential components of post-high school guidance, but not sufficient for effective, efficient, rational guidance. The design provided for integrating occupational dissemination, testing, and counseling as related components in a planned intervention approach. The basis for integration of guidance services was a non-transfer course in which occupational information was presented through audio-visuals, on-site visits, speakers, and career kits; testing was done and test data on students' interests, aptitudes, and abilities were presented and interpreted during class sessions. Support for this approach was provided by the study of Ryan (1964) in a California junior college.

Rationale for the study at Blue Mountain Community College was defined by assumptions relating to dependent and independent variables. Definition of dependent variable derived from decision theory. Identification of counseling techniques and guidance materials as independent variables was made following findings from behavioral counseling research, learning theory, simulation studies and game theory.

E. Purposes and Objectives

A basic aim of the study was to identify viable vocational guidance techniques and materials for helping post high school youth develop skills for making sound occupational choices and educational plans. The study was concerned with testing a planned vocational guidance program in a community college setting. Specific objectives of the study were (1) to test effects of reinforcement counseling techniques on students' acquisition of vocational information and vocational decision-making as measured by information inventory and vocational decision making criterion tests; (2) to test effects of simulation materials on students' acquisition of vocational information and vocational decision making, as measured by information inventory and vocational decision criterion tests. The study also attempted (1) to determine relation between counseling techniques and students' need achievement as measured by need-achievement score of Edwards Personal Preference Schedule and self-concept as measured by California Q-sort consistency index; and (2) to evaluate a developmental program for helping students overcome basic learning deficiencies, as measured by change scores on study skills inventory, cooperative reading test, and scholastic aptitude test.

The study tested the following research hypotheses:

Hypothesis 1. Reinforcement counseling techniques are effective for improving students' vocational decision-making. Two predictions were derived from this hypothesis:

Prediction 1. Ss in groups receiving reinforcement counseling (RCG) will score higher on vocational decision test than Ss receiving group counseling without counselor reinforcement (GCG) or Ss receiving only individual counseling with no participation in counseling groups (IC).

Prediction 2. Ss in reinforcement groups (RCG) will score highest; Ss in counseling groups without reinforcement (GCG) will score next highest; and Ss in individual counseling, inactive control (IC) will score lowest on vocational decision test.

Hypothesis 2. Reinforcement counseling techniques are effective for helping students to acquire knowledge of sources of personal data and occupational information. Two predictions were derived from this hypothesis.

Prediction 3. Ss in groups receiving reinforcement counseling (RCG) will score higher on occupational information inventory than Ss receiving group counseling without counselor reinforcement (GCG) or Ss receiving only individual counseling, inactive control (IC).

Prediction 4. Ss in reinforcement groups (RCG) will score highest; Ss in counseling groups without reinforcement (GCG) will score next highest; and Ss in individual counseling, inactive control (IC) will score lowest on information inventory.

Hypothesis 3. Stimulation materials are effective in improving students' vocational decision-making. Two predictions were derived from this hypothesis.

Prediction 5. Ss in counseling groups using simulation materials and receiving counselor reinforcement (SRG) will score higher on vocational decision test than Ss in groups receiving counselor reinforcement without simulation materials (RCG).

Prediction 6. Ss in counseling groups using simulation materials and receiving counselor reinforcement (SRG) will score higher on vocational decision test than Ss in counseling groups using self-exploratory materials (SEG) or Ss in general counseling with no special materials (GCG) or Ss receiving only individual counseling (IC).

Hypothesis 4. Simulation materials are effective for helping students acquire knowledge of sources of occupational information. Two predictions were derived from this hypothesis.

Prediction 7. Ss in counseling groups using simulation materials and receiving counselor reinforcement (SRG) will score higher on occupational information than Ss in groups receiving counselor reinforcement without simulation materials (RCG).

Prediction 8. Ss in counseling groups using simulation materials and receiving counselor reinforcement (SRG) will score higher on occupational information than Ss in counseling groups using self-exploratory materials (SEG) or Ss in general counseling groups with no special materials (GCG) or Ss receiving only individual counseling (IC).

In addition to major hypotheses data were gathered in this study relevant to evaluation of counseling techniques for helping students increase need achievement and developmental program intended to help students overcome learning deficiencies.

II. Method

A. Experimental Design

This study attempted to test effects of reinforcement counseling techniques and simulation materials on students' vocational decision-making. In this investigation vocational decision-making behavior was limited to verbal choice-making responses, indicating that Ss had gathered information for use in deciding on a vocational goal, were deliberating about future vocational goals by considering relevant information in terms of possible alternatives and consequences, or had decided on an occupational choice after considering alternatives and consequences.

A posttest control group design was implemented including active and inactive control groups with Ss assigned randomly to treatment conditions. In testing major hypotheses analysis of variance techniques were employed to determine if statistically significant differences on criterion test scores obtained. Control over learning variables was implemented by restricting the population to students whose scores on college entrance scholastic aptitude tests fell below the fiftieth percentile and by enrolling all Ss in a common instructional program designed to help overcome learning deficiencies. Control over initial decision-making behavior was gained through limiting the population to students whose educational plans and occupational choices were not definitely decided. In order to insure that all students would have the same kind and amount of information about themselves and about the world of work as prerequisite for sound occupational choice-making, all Ss were enrolled in core program which provided testing, test interpretation, and dissemination of occupational information. All students had access to individual counseling provided as part of the student personnel services of the community college. Control over counselor influence was implemented through use of a counterbalanced design with three replications over three quarters of two academic years with counselors assigned initially to replication 1, 2, or 3 (Table 1).

Counselors also functioned as instructors of the psychology laboratory in which testing and test administration was done and occupational information was disseminated.

Table 1. Treatment replication over three quarters with three counselors per quarter for two academic years.

1965-66				1966-67			
Counselor Replication	Quarter			Counselor Replication	Quarter		
	Fall	Winter	Spring		Fall	Winter	Spring
1	RCG	GCG	C	1A	SRG	SEG	C
2	GCG	C	RCG	2A	SEG	C	SRG
3	C	RCG	GCG	3A	C	SRG	SEG

The study was carried out over a two-year period, and it was assumed that student population for the two years remained constant in terms of student background and characteristics. This assumption was checked and verified through implementation of statistical techniques to identify individual differences. Control over Hawthorne effect was achieved through use of placebo groups, in which students participated in group counseling sessions having no counselor reinforcement and no simulation materials.

B. Subjects

The population for the study consisted of 333 students enrolled in Blue Mountain Community College, Pendleton, Oregon between September 1965 and June 1967, whose verbal and quantitative scores on the college entrance examination (SCAT, ACT) fell below fiftieth percentile and who either had not made firm vocational choices or whose stated vocational goals appeared unsound in terms of measured abilities, aptitudes, and interests. A one hundred percent sample was used in the study, with students assigned randomly to treatment conditions. Of 333 students drawn for the study, there was attrition of 33, leaving a total of 300 students participating in the project. Assignment of Ss and attrition by treatment condition is shown in Table 2, Appendix A.

C. Common Core Program

All students were enrolled in a common core program, designed to help them overcome educational deficiencies, and acquire information about themselves and the world of work. The program consisted of two components, developmental program of twelve hours per week devoted to instruction in basic skill areas and effective study, and a psychology laboratory of three hours per week in which vocational testing and occupational information dissemination were accomplished. In the developmental program eight hours were devoted to reading laboratory, in which individualized instruction was given to help develop and improve students' reading processes. Programmed materials, perceptual training, controlled readers, and vocabulary exercises were used to foster favorable attitude to reading and to increase reading rate, comprehension, vocabulary, growth, flexibility of reading attack and interest in reading. Four hours were devoted to training in SQ3R technique of effective study to help students learn how to improve time use, increase classroom skills, and understand test techniques.

The main aim of the psychology laboratory was to help students understand human behavior, develop abilities to solve personal and social problems, acquire self-understanding and acquire background of information about occupations and occupational opportunities. Psychological testing of each student was accomplished during the laboratory, in order to provide students with basic information about their interests, abilities, aptitudes and characteristics relevant to making occupational choices. The Otis Quick Scoring Mental Ability Test, Kuder Vocational and Personal Inventories, Edward Personal Preference Schedule, and General Aptitude Test Battery were administered and interpreted during the laboratory. Occupational information was disseminated through a planned program of films, speakers, career kits, and pamphlets. Speakers from local businesses and industries provided information on the following occupational areas of particular significance to the geographic region in which the school was situated: office occupations, law enforcement, civil engineering and drafting, health occupations, domestic service occupations, forestry, automotive technology, electronics technology, and agricultural occupations.

It was assumed that testing of the major research hypotheses would determine comparative effects of using selected counseling techniques and vocational guidance materials for helping students acquire proficiency in selecting and using relevant information about themselves and the world of work to make realistic occupational decisions. To provide a common frame of reference and to orient students to the vocational decision-making process, a general lecture on vocational choice was given initially as part of the core program (Appendix B-31). This was followed by discussion sessions led by the counselor to direct students to think about vocational decision-making in relation to goals and values (Appendix B-29-30).

D. Counselors

Professional staff members holding regular academic appointment as counselor-instructors in the community college implemented the counseling treatments in this investigation. All counselors in the study were male.

E. Training Program

Counselors were given pre-service and in-service training in use of counseling techniques and guidance materials. Didactic instruction, demonstration, role-playing, and taping of trial counseling sessions were carried out in the training period. In-service training was conducted by project director throughout the program. Tapes of counseling sessions were monitored and feedback training sessions were held. An attempt was made to insure that under all treatment conditions counselors would create atmosphere of freedom from threat, and show warmth, understanding, and personal regard for the students in the counseling groups.

F. Counselors' Packets

Counselors' packets were prepared to provide a measure of control over variance deriving from differences in counselor implementation of a given technique, and to reinforce training program. Packets contained seven sections, A through G including (A) general background information reinforcing pre-service training lectures; (B) participant agreement forms for students to sign showing commitment to participate and attend sessions; (C) and (D) reminder letter to be sent to participants prior to first session giving general orientation to program; (F) attendance records; (G) outlines for orientation lectures and discussion guides. Section E contained counselor instructions for use of different techniques and materials. The section contained special materials for each technique. A Counselor packet is included as Appendix B.

G. Treatments

Counseling techniques and vocational guidance materials constituted primary independent variables in this study. Reinforcement group counseling technique (RCG) was compared with non-reinforcement group counseling (GCG), an active control, and individual counseling, (IC) an inactive control. Simulation occupational decision-making materials (SRC) was compared with self-exploratory materials (SEG), as well as with active control counseling groups in which no planned, printed materials were used (GCG), and inactive control, Ss receiving only individual counseling (IC). Selection of variables was made on basis of prior research pointing to effectiveness of behavioral counseling for developing students' vocational decision-making (Ryan, 1964, 1964a) and related research suggesting feasibility of using simulation materials (Boocock, 1963, 1966).

H. Counseling Techniques

1. Reinforcement counseling groups. Ten group counseling sessions were held each quarter. Sessions were fifty minutes in length, with three to five minutes for opening, three to five minutes for summarizing and closing, and forty minutes for reinforcement counseling. Each group consisted of seven to ten students and the counselor. Each session was devoted to a specific topic related to selecting an occupational goal. Counseling sessions were semi-structured. In the opening, counselor made introductory remarks to establish rapport, ending with a statement of the topic for the session. Throughout the counseling period counselor gave cues conversationally to elicit responses from students relevant to the

particular aspect of occupational decision-making with which the session was concerned. As students responded, counselor reinforced verbally positive vocational decision-making responses of the students. Reinforcers were verbal responses showing counselor approval and encouragement, such as, "Good," "Fine," "That sounds like a good idea," "Good point," "Yes. . . . Considering one's interests is important in deciding what kind of work a person wants to do." Positive responses were defined as any responses indicating awareness of the relevance to occupational choice-making of student self-understanding, knowledge of occupational information, knowledge of sources of personal data and occupational information, understanding of and skill in weighing alternatives, considering consequences of competing alternatives, making decisions in terms of probable personal satisfaction and social and economic feasibility factors. Topics for the ten sessions and counselor cues for each topic are given in Appendix C. In closing each session counselor called on one of the participants to summarize the main points covered in the session. Counselor terminated session with final reinforcement such as, "You had some good ideas this session. Some of the ideas you mentioned, such as . . . . , seem especially important and worthwhile to consider in coming to a decision about your future work. Our next session will be here at the same time . . . . ." A typescript of a reinforcement counseling group session is given in Appendix D.

2. General counseling groups. These counseling groups, designed as active control over Hawthorne effect, were equated to the reinforcement counseling groups in terms of counseling time, number of sessions, topics covered during sessions, group size and group composition. During the general counseling group sessions, however, counselor gave no verbal reinforcement for positive vocational decision-making responses. Cueing was used to encourage discussion.

3. Individual counseling. Approximately one third of the Ss was assigned randomly to receive no counseling other than individual counseling services provided by the college. In this treatment, designed as an inactive control, students had a regular meeting of the psychology class in lieu of the small group counseling received by Ss in other treatment conditions. Thus, all students in the project had two days per week of psychology laboratory. Students in counseling treatments received group counseling and students in inactive control had a regular class meeting on the third day.

I. Vocational guidance materials

1. Simulation materials. In one condition simulation materials were used in addition to counselor reinforcement during the group counseling sessions. Opening and closing periods for the session were similar to those used in the other group counseling treatments. During the counseling period, counselor presented profile of a student saying, "This is (name of student), a student much like yourselves. On this sheet you will find information about his (her) family, his (her) school record, his (her) interests, abilities and aptitudes. You are to put yourselves in the place of (name of student) and together make decisions and plans concerning his education and work for the next four or five years after his (her) graduation from high school. You are to decide what school he (she) will attend, what he (she) will take in school, what information he (she) will look for and what activities he (she) will try before deciding on a full-time job which will be the beginning of his work career."

The profiles of fictitious students described students similar in background and characteristics to students participating in the vocational guidance project. In orienting students to the simulation task counselor explained to the group that in planning the life of a typical student for the four or five year period, they should consider the student's background, abilities and interests; they should talk about alternative choices he might make and consequences of taking different courses of action. During the counseling period the counselor provided information about the fictitious student, and indicated consequences of different courses of action. During each simulation task, counselor introduced the "unplanned events" such as losing a job or sustaining a critical injury, designed to give students practice in making decisions and adjusting courses of action in view of extenuating circumstances. During the session counselor gave verbal reinforcement, that is, encouraging and approving responses, when participants referred to need for information, sources of information, need to weigh information, consider alternatives and consequences of different alternatives, need to make decisions on basis of having weighed alternatives and need to select one that seemed to offer greatest probability of success and satisfaction.

Development of simulation materials is described in Appendix E. Instructions to counselors for using simulation materials are given in Appendixes B 13, 14, 15. Profiles of fictitious students and unplanned events for the profiles are given in Appendixes B 16 to 26.

Typescript of a counseling session in which simulation materials were used is given in Appendix F.

2. Self exploratory vocational guidance materials. During counseling sessions in which self-exploratory materials were used, counselor implemented the same opening and closing as for other group counseling sessions. During counseling period self-exploratory vocational guidance materials were used. These materials consisted of a set of short essays on the same general topics covered in the reinforcement counseling sessions with a self-evaluation task sheet accompanying each essay. Tasks called for self-exploration and personal consideration of occupational choices as opposed to simulated decision-making for a fictitous person as was done in simulation counseling groups. For example, an essay on attitudes, capacities, and interests in relation to occupational choice was followed by a task sheet asking the student to describe his interests, abilities, and attitudes. Instructions to counselors for using self-exploratory materials are given in Appendix G. Vocational guidance essays and accompanying task sheets are given in Appendix H.

J. Evaluation, Data-gathering, and Data Treatment

Data were gathered to determine extent to which primary objectives were achieved, to test the research hypotheses, and to answer secondary research questions.

1. To determine effects of different counseling techniques on improving students' vocational decision making (Hypothesis 1) an Educational and Vocational Inventory was administered as a pre- and posttreatment criterion test (Appendix I). The inventory, developed during a pilot project, was found to have a test-retest coefficient with two-week interval of r = .92 (N = 60). Scoring of the inventory was designed to evaluate three components of occupational decision-making: information-seeking, deliberating about possible choices and deciding. Question 15 was intended to elicit responses indicating extent of information-seeking in relation to an occupational choice; items 13 and 14 were intended to elicit responses indicating extent of deliberation, weighing of alternatives in relation to occupational choice; items 11 and 12 were designed to elicit responses indicating if an occupational choice had been made and extent to which decisions appeared realistic. Scoring was on an 8-point scale allowing 2 points for information seeking; 3 points for deliberating; and 3 points for deciding, as follows: Information seeking = allow 2 points for choices 1, 2, 3 or 4, Item 15. Deliberation = allow 1 point for choice 1 or 2,

Item 13 and 2 points for choice 1 or 1 point for choice 2, Item 14. Vocational decision = allow 1 point for choice 1 or 2, Item 12; allow 2 points if choice in item 11 appears sound in terms of student interests, aptitudes, abilities. Since scoring for Item 11 called for rater judgment, inter-rater reliability was computed by comparing scoring of thirty randomly selected tests scored by two independent raters. Inter-rater reliability was found to be r = .95.

Mean scores on pretreatment and posttreatment EVI were computed by treatment conditions. Mean pretreatment scores, compared to measure initial differences, revealed that differences were not statistically significant. Analysis of variance was performed on posttreatment scores to test Predictions 1 and 2, relative to comparative effects of counseling techniques on vocational decision making of post high school youth. Comparison of scores on the criterion test for reinforcement group counseling, non-reinforcement group counseling and individual counseling was made to test Prediction 1, that reinforcement group counseling would be more effective than non-reinforcement group counseling or individual counseling in developing students' vocational decision making. Further comparison of these data was made to test Prediction 2, relating to direction of differences among the three treatment groups.

2. To determine effects of different counseling techniques on students' acquisition of knowledge of sources of occupational information and personal data (Hypothesis 2) an Information Inventory was administered as pre- and posttreatment criterion test (Appendix J). The inventory, developed in a pilot project, was found to have a test-retest coefficient on two-week interval of r = .84 (N = 60). The inventory calling for responses to ten open ended questions was designed to elicit responses indicating extent to which respondents were aware of sources of information about themselves and the world of work. Scoring was on a 20-point scale, with possible 2 points for each item. A scoring key was provided, listing acceptable responses for each item. Since scoring involved rater judgment, inter-rater reliability was computed by comparing scoring by two independent raters of thirty randomly selected tests. Inter-rater reliability was found to be r = .93.

Mean scores on pretreatment and posttreatment Information Inventory were computed by treatment conditions. Mean pretreatment scores, compared to measure initial differences, revealed that differences between treatments were not statistically significant. Analysis of variance was performed on posttreatment scores to test Predictions 3 and 4, relative to comparative effects of counseling techniques on students' knowledge of sources of personal data and occupational information. Comparison of scores on criterion test for reinforcement group counseling, non-reinforcement group counseling, and individual counseling was made to test Prediction 3, that reinforcement group counseling would be more effective than either non-reinforcement group or individual counseling. These data also were used to test Prediction 4, relative to direction of differences among the treatment groups on the criterion tests.

3. To determine effects of different kinds of vocational guidance materials on students' vocational decision-making, mean scores on Educational and Vocational Inventory were computed by treatment condition for simulation-reinforcement groups (SRG), reinforcement groups without simulation (RCG), self-exploratory groups (SEG), general counseling groups (GCG), and inactive controls, individual counseling (IC). Comparison of criterion test scores for simulation-reinforcement groups (SRG) and reinforcement counseling groups (RCG) was made to test Prediction 5 that students in counseling groups in which simulation materials are used and counselor reinforcement given score higher on vocational decision criterion test than students in counseling groups in which simulation materials are used but counselor reinforcement not given. To test Prediction 6, that simulation materials would be more effective than non-simulation materials or no special materials, comparison was made of criterion test scores for counseling groups using simulation materials, counseling groups using self-exploratory materials, counseling groups using no special vocational guidance materials, and students receiving only individual counseling.

4. To determine effects of different kinds of guidance materials on students knowledge of sources of personal data and occupational information, pre- and posttreatment scores on Information Inventory were compared by treatment group. Comparison of mean pretreatment scores revealed no significant differences between groups. Analysis of variance was performed on posttreatment results to test Predictions 7 and 8, relative to comparative effects of special guidance materials on students' knowledge of sources of personal data and occupational information. To test Prediction 7, that simulation materials would be more effective than reinforcement counseling without simulation materials for helping students learn sources of occupational information, posttreatment criterion scores were compared for groups using simulation materials and having counselor reinforcement and groups having counselor reinforcement but no simulation materials. To test Prediction 8, that simulation materials would be more effective than self-exploratory materials

or no special materials in helping students learn sources of occupational information, comparison was made of criterion test scores for simulation-reinforcement groups, self-exploratory groups, general counseling groups not having special materials, and students receiving individual counseling only.

In addition to testing the three major hypotheses and the eight predictions derived from these hypotheses, data were gathered relating to three secondary research questions.

1. Evaluation of counseling techniques for helping students increase need achievement was made by comparing mean N-ach scores on Edwards Personal Preference Schedule for students receiving reinforcement group counseling (RCG), group counseling without reinforcement (GCG), simulation materials-reinforcement counseling (SRG) self-exploratory group counseling (SEG); and individual counseling (IC). Mean scores were computed and analysis of variance performed on these data.

2. Evaluation of counseling techniques for helping students develop adequate self concepts was made by comparing Ss, California Q-sort with the CQ set description of optimally adjusted personality and computing consistency scores. Since data satisfied parametric assumptions, mean consistency scores were computed and compared through analysis of variance techniques, following Block (1961, pp. 104-5) who noted that if r is recognized as simply a convenient index or score and statistical methods appropriate to obtained distribution of scores are used, there is no danger of making unwarranted inferences . . . and that a "primary use of the index of similarity is with regard to the question, do members of one group correlate higher than members of another group with a criterion?" In this research the question was whether students under one treatment condition would correlate higher with the criterion, the optimally adjusted personality, than students in another treatment.

3. Evaluation of the developmental program was made by gathering information relating to student's study habits and educational performance. To determine effects of the program on students' study behavior, mean pre- and posttreatment scores on the Study Habits Inventory (Appendix K) were computed for a randomly selected group of students (N = 200) who participated in the developmental program. Change scores were tested for statistical significance. To determine effects of the program on students' educational performance, mean pre- and posttreatment scores on the STEP test were computed for a randomly selected group of students (N = 200)

who had participated in the developmental program. Change scores were computed and tested for statistical significance. The Study Habits Inventory has reliability coefficient on test-retest of .88 to .92 (N = 160). On validation test against grade point average (N = 16), correlation coefficient of .27 was found, significant at .05 level. Correlation between SHI and Brown Holtzmann, SSHA (N = 1194) was reported as .30, significant at .05 level.

III. Results

A. Description of Institutional Setting, Counseling Setting and Sample

1. Institutional Setting. The extent to which results from a research investigation will generalize is a function of comparability between other settings and samples and the research setting and sample. This study of a post-high school vocational guidance program with professional counseling staff implementing the counseling role, was conducted at Blue Mountain Community College, a public two-year coeducational post high school institution located at Pendleton, Oregon, a city of 15,000 population. The total student enrollment of the community college at the time of the investigation was approximately 650. The extent to which finding from the study can be generalized to other post high school institutions is limited by the degree of comparability between institutional settings and student populations.

Blue Mountain Community College offers a two-track educational program, liberal arts and sciences, and applied sciences and technologies. The college approved by the State Board of Education, provides a curriculum based on local needs of students and citizens of the community. The institution is locally controlled and dedicated to the principle that equal educational opportunity should be provided for all residents of the district. At the time of this investigation the college did not provide residential facilities for students. The college was dedicated to the aim of enabling students to live with their families for two years beyond high school, a period during which they could be "finding themselves socially, occupationally, and educationally." Lending to this orientation facilities were provided for individualized counseling to meet the needs of all students. The student personnel division of the college had as its major responsibility the individual student--his adjustment to college, his academic progress towards educational goals, and development of his self.

A placement examination, consisting of college ability test, achievement test and English reading test was administered to

entering students. Results from entrance tests were used as a basis for delimiting the population for this study. Only students who scored below the fiftieth percentile on the college ability test (SCAT, ACT) were included in the study. A further delimiting factor was that students included in the study had not made firm decisions regarding their post-high school occupational plans.

2. Counseling Setting. The small group counseling sessions were held in college conference rooms. No attempt was made to structure group composition. Groups were made up by random assignment of students to counseling groups.

3. Sample. The students participating in this investigation had in common a deficit in educational achievement and lack of a firm career decision. Description of the sample by age, sex, and grade level, is given in Table 3 (Appendix L-1).

Subjects were of average mental ability, with sample characterized by homogeneity more than individual differences on this dimension. Table 4 (Appendix L-2) reports means and standard deviations on Otis Quick Scoring Mental Ability Test for sample by treatment groups.

B. Pre-treatment vocational decision-making and knowledge of sources of personal data and occupational information

Pre-tests for vocational decision-making and knowledge of sources of personal data and occupational information were administered the first week of the term, prior to Ss' participation in counseling, to determine initial differences among treatment groups. Responses to the pre-treatment question, "Have you made a vocational choice?" are tabulated in Table 5, Appendix L-3.

As can be seen from Table 5 (Appendix L-3), Ss were relatively homogeneous with respect to their vocational decision-making before participation in the counseling project. None of the students had made a firm decision. In all groups approximately one-fourth of the students reported being completely undecided with three-fourths reporting "somewhat undecided."

The Information Inventory, administered as a pre-treatment criterion test to determine initial differences among groups on knowledge of sources of personal data and occupational information, was scored on a 20-point scale. Means and standard deviations were computed by treatment group. These data are reported in Table 6, Appendix L-4. Inspection of Table 6 (Appendix L-4) indicates that all groups were relatively homogeneous with regard to their knowledge of sources of occupational information before participation in the counseling project.

C. Results of criterion tests

In analyzing data from criterion tests analysis of variance techniques were employed to determine differences between treatments, and t-tests were made to compare between groups when variance analysis revealed statistically significant differences between treatments.

1. Testing Effects of Reinforcement Counseling Techniques on Vocational Decision Making. To test effects of planned reinforcement counseling with small groups of post high school students on students' vocational decision-making, three treatment conditions were compared: (RCG) reinforcement counseling groups, in which counselor gave cues and reinforced selected vocational decision making responses of group members; (GCG) general counseling groups in which counselor did not reinforce students' favorable vocational decision-making responses; and (IC) individual counseling, an inactive control in which Ss did not participate in group counseling. The criterion test for vocational decision-making was the Educational and Vocational Inventory, administered to all Ss as a posttest. Scores on the inventory for Ss in each of the four treatment conditions were summed and means computed. Mean scores on the EVI for the three treatments are shown in Table 7, Appendix M-1.

Taking into account unequal cell frequencies, analysis of variance was performed on the data. The variance analysis, reported in Table 8, Appendix M-2, revealed significant treatment differences at the .01 level. Inspection of means in Table 7, Appendix M-1, reveals that mean scores on the criterion decision-making test ranged from 2.93 to 5.43, with reinforcement counseling group mean of 5.43; general counseling group mean of 3.56, and individual counseling mean of 2.93. Differences between reinforcement counseling group treatment and both general counseling groups and individual counseling were found to be significant. These findings support Prediction 1 that Ss in groups receiving reinforcement counseling would score higher on vocational decision test than Ss receiving group counseling without counselor reinforcement or Ss receiving only individual counseling with no participation in counseling groups.

Comparison of the mean scores for the three treatments, reinforcement counseling groups, general counseling groups, and individual counseling revealed a significant trend, with reinforcement counseling proving to be the most effective, general counseling groups the next most effective, and individual counseling the least effective. These findings support Prediction 2, that Ss in reinforcement groups would score highest, Ss in counseling groups without reinforcement would score next highest and Ss in individual counseling would score lowest on the vocational decision test.

Control for counselor differences. It was assumed that differences between treatments on criterion tests would reflect to some extent variance associated with counselor effects. However, analysis of variance performed on mean decision scores for reinforcement group counseling and general group counseling failed to reveal significant differences for counselor effect.

2. Testing effects of reinforcement counseling techniques on students knowledge of sources of personal data and occupational information. To test effects of planned reinforcement counseling with small groups of post high school students on students' knowledge of sources of occupational information and personal data, three treatment conditions were compared: (RCG) reinforcement counseling groups; (GCG) general counseling groups; and (IC) individual counseling. Criterion test was Occupational Information Inventory administered to all Ss as a posttest. Scores on the inventory for Ss were summed and means computed by treatment condition. Mean scores on the Information Inventory for the three treatments are shown in Table 9, Appendix M-3. Comparison of mean scores on the Occupational Information Inventory revealed significant treatment differences at the .01 level. Comparison of means by t-test revealed no differences between general counseling groups (active control) and individual counseling (inactive control). However, reinforcement group counseling was significantly superior to both general counseling groups and inactive controls at .01 level. These data support Prediction 3, that Ss in reinforcement group counseling would score higher on occupational information inventory than Ss in counseling groups without reinforcement counseling and Ss in inactive control, receiving no group counseling (Table 10, Appendix M-4).

Comparison of mean scores on information test for the three treatments indicates that the predicted trend did not obtain. Although reinforcement group counseling was found to be the most effective treatment for helping students become aware of sources of information on occupations and personal data, the next most effective treatment was found to be the individual counseling. For the three treatments the mean scores on information test were found to be 11.94, 8.96 and 8.98 for reinforcement counseling, general counseling, and individual counseling, respectively. The difference between the general counseling groups and individual counseling, .02, was not significant. In effect these two treatments were equivalent. The results failed to support Prediction 4, that Ss in reinforcement counseling groups would score highest; Ss in counseling groups without reinforcement would score next highest, and Ss in individual counseling would score lowest on information inventory criterion test.

3. Testing effects of simulation materials for improving students' vocational decision-making. To test effects of simulation materials for improving students vocational decision-making, five treatment conditions were compared: simulation materials with counselor reinforcement (SRG); counselor reinforcement without simulation materials (RCG); counseling groups without counselor reinforcement and without simulation materials (GCG); counseling groups with self-exploratory materials (SEG); individul counseling only (IC). Criterion test was Educational and Vocational Inventory (EVI). Scores on the criterion test were summed and means computed by treatment conditions. Mean scores for the five treatments are shown in Table 11 (Appendix M-5). Inspection of Table 11 reveals that mean decision scores ranged from 2.03 for inactive control to 6.13 for simulation materials reinforcement group counseling, with means for other conditions as follows: reinforcement counseling groups, 5.40; self-exploratory groups, 4.60; and general counseling groups, 3.56. Analysis of variance performed on these data (Table 12, Appendix M-6) revealed significant differences for treatment at the .01 level. Comparisons between groups, shown in Table 13, Appendix M-7, reveals that in each treatment comparison, the difference was statistically significant. Results confirmed Prediction 5, that Ss in counseling groups using simulation materials and counselor reinforcement (SRG) would score higher on vocational decision test than Ss receiving counselor reinforcement without simulation materials (RCG).

Results also confirmed Prediction 6, that Ss in counseling groups using simulation materials and counselor reinforcement would score higher on vocational decision test than Ss in counseling groups using self-exploratory materials (SEG), Ss in general counseling groups with no special materials (GCG), or Ss receiving only individual counseling (IC).

4. Testing effects of simulation materials on developing student knowledge of sources of personal data and occupational

information. To test effects of using simulation materials to develop students knowledge of sources of occupational information, five treatment conditions were compared, (SRG) simulation materials, counselor reinforcement; (RCG) reinforcement counseling without simulation; (SEG) self exploratory materials; (GCG) counseling without simulation and without reinforcement; and (IC) inactive control. Criterion test was Information Inventory administered as a posttest. Pretest on knowledge of sources of occupational information revealed no significant differences between treatment groups. Therefore, posttest scores were summed and means computed. These data are reported in Table 14, Appendix M-8. Analysis of variance performed on these data is reported in Table 15, Appendix M-9. Comparison of mean scores on Occupational Information Inventory revealed both simulation-reinforcement counseling and reinforcement groups without simulation statistically superior to the other three treatments, self-exploratory groups, general counseling groups, and inactive control. There were no differences found between the simulation-reinforcement and the reinforcement counseling groups. No differences were found between the other three groups, self-exploratory, general counseling groups and inactive control. Results failed to confirm Prediction 7 that Ss in counseling groups using simulation materials with counselor reinforcement would score higher on test of knowledge of sources of personal data and occupational information than Ss in groups receiving counselor reinforcement without simulation materials.

Results confirmed Prediction 8, that Ss in counseling groups using simulation materials with counselor reinforcement would score higher on test of knowledge of sources of personal data and occupational information than Ss in counseling groups using self exploratory materials, Ss in general counseling groups, and Ss in inactive control.

5. Evaluation of counseling program for increasing Ss need achievement, developing adequate self concepts, and overcoming learning deficiencies.

a. Developing need-achievement. To answer questions concerning effects of the counseling program on development of Ss' need achievement, the Edwards Personal Preference Schedule was administered to Ss in all treatment conditions; need-achievement scores were summed and means computed (Table 16, Appendix M-10). Means on N-ach posttest scores, 12.71, 13.33 14.11, 13.50 and 13.63 for simulation-materials, reinforcement counseling; reinforcement counseling groups; self-exploratory materials; general counseling groups; and inactive controls, respectively, were subjected to variance analysis (Table 17, Appendix M-11). No statistically significant differences were found between treatments on the criterion scores.

b. Developing adequate self concepts. To answer questions concerning effects of the counseling program on development of adequate self concepts, the California Q-Sort was administered as a posttest. Index of similarity scores, obtained by comparing Ss' scores with that of optimally adjusted personality, were summed and means computed by treatment group. These data are reported in Table 18, Appendix M-12. Mean scores for treatment groups were treated to analysis of variance (Table 19, Appendix M-13) to determine if significant differences obtained between groups.

Comparison of self concept adequacy revealed no differences between simulation without reinforcement and simulation with reinforcement, mean scores for the two groups being 39.53 and 39.56, respectively. No differences were found between general counseling groups (inactive control) and the individual counseling (active control) with mean scores for the two treatments found to be 33.76 and 33.15, respectively. The simulation materials-reinforcement counseling and reinforcement counseling groups were found to be superior to the self exploratory groups ($p < .05$) and to the active and inactive controls ($p < .01$). Comparisons between groups on the self concept adequacy scores are shown in Table 20, Appendix M-14.

c. Overcoming learning deficiencies. To answer questions concerning value of the developmental program for overcoming learning deficiencies of students enrolled in the community college, change scores on the Cooperative Reading Test and Study Habits Inventory were computed for 200 Ss selected randomly from the total population for the study. Means and standard deviations for pre- and post-treatment were computed on the two criterion measures, and change scores were tested for statistical significance. The pre and post mean scores for Cooperative Reading Test were 152.22 and 152.02, respectively, revealing no significant change from pre to post treatment. The pre and post mean scores for Study Habits Inventory were found to be 155 and 190, respectively. Mean change was found to be statistically significant at .001 level (Table 21 Appendix M-15).

IV. Discussion

A. Effectiveness of reinforcement counseling on students' vocational decision-making and knowledge of sources of occupational information.

The results from this study offer support for two predictions drawn from the general hypothesis that vocational decision making of community college youth can be improved by use of reinforcement counseling techniques with small groups of students. Students participating in reinforcement counseling groups scored significantly higher on the vocational decision making criterion test than students who had participated in general group counseling without planned reinforcement or students in the inactive control who received no group counseling. These findings indicate that planned cueing and counselor reinforcement are viable techniques for helping community college students improve vocational decision-making, suggesting that the use of reinforcement counseling techniques in group setting is to be preferred to either individual vocational counseling or group counseling without planned counselor cueing and reinforcement for developing students' vocational decision making skills and abilities.

Students participating only in individual counseling failed to develop vocational decision making at the level of those in the reinforcement groups, suggesting that individual counseling is not the most effective way to implement vocational guidance goals. The failure of general group counseling to produce significantly positive outcomes suggests that it is not sufficient for counselors to create a warm, understanding atmosphere. It seems that active intervention is an important variable in effective vocational counseling. For community college students handicapped by learning deficiencies, the group counseling approach, implementing counselor cueing and reinforcement techniques, appears to hold considerable merit since it provides a viable way for helping students improve their vocational decision making skills and abilities.

Evaluation of reinforcement counseling techniques for increasing students' knowledge of sources of occupational information suggests that the reinforcement techniques in group counseling situations are effective for helping students to become familiar with the sources of information about occupations and data about individual interests, abilities, and characteristics which would be important to consider in deciding on an occupational goal. Although the reinforcement counseling techniques were shown to be viable when used with small groups of students for helping them in the information seeking phase of the career choice process, the data failed to find any superiority for group counseling without reinforcement over individual counseling for helping students become skilled in occupational information seeking. The findings suggest that providing an occupational information service as an adjunct to individual occupational counseling is an important part of the guidance program in post-secondary schools, but not sufficient to develop information seeking behavior in the student population. In this study a planned program of occupational information dissemination was provided, including guest speakers career guides, and occupational information materials. All students participated in a testing program to provide information about themselves. However the students in general counseling groups, where counselors did not use planned cueing and reinforcement, and the students who did not participate in group counseling were alike in failing to internalize the information dimension in relation to the career choice process.

B. Effectiveness of simulation materials on students' vocational decision-making and knowledge of sources of occupational information.

The results from this study offer partial support for hypotheses relating to effectiveness of simulation materials for improving decision-making skills and increasing knowledge of the sources of occupational information.

The combination of simulation materials and planned counselor reinforcement and cueing was found to be the most effective approach for developing students' vocational decision-making skills and abilities. When simulation materials were compared to self-exploratory materials, it was apparent that the simulation approach held more advantages for teaching vocational decision making to students at post secondary level. This proved to be the case even when the self-exploratory materials were especially prepared to compensate for reading deficiencies of the student. It is suggested that the "self-exploratory" approach may be implementing a punishment for students, as opposed to the reward obtaining with use of simulation materials. It is likely that students have had a long-term experience with "self-exploratory materials" during the course of their previous schooling, and many of these experiences may have been linked with grade-punishment or teacher-punishment because of failure to satisfy grammar, writing, punctuation and related components. It is suggested that students fill out the "self-exploratory" exercises to satisfy requirements of the teacher or course, rather than thinking of these exercises in relation to the students' own career planning. It is suggested further that the exercises lack provision for building vocational decision-making skills. The self exploratory approach appears to be oriented toward making a specific career choice or plan, rather than developing vocational decision-making skills and abilities. The simulation materials, reinforcement counseling was found to be effective for helping students to acquire knowledge of sources of information about occupations and data about themselves. It is suggested that the reinforcement counseling, more than the simulation materials, probably contributed to this outcome. It was noted that no differences obtained between reinforcement counseling with simulation materials and reinforcement counseling without simulation materials in developing students' occupational information background. It is suggested that when simulation materials are combined with reinforcement counseling, the students learn about occupational information sources and use of occupational information in relation to vocational decision-making tasks. In developing the life plans for the students described in the simulation profiles, it was necessary to consider information. Thus, students in the counseling groups became aware of the kinds of information that had to be taken into consideration and sources of this information.

There is clearcut evidence to indicate that the most effective approach for teaching knowledge of occupational information sources and developing vocational decision making skills is the combination of simulation materials and planned counselor cueing and reinforcing with small groups of students. This approach combines advantages obtaining from reinforcement counseling techniques and simulation materials.

C. Evaluation of program for increasing students' need achievement, developing self concept, and overcoming learning deficiencies.

a. Results from the study failed to indicate any superiority of the group counseling program for increasing students' need achievement. It is suggested that this finding doubtless derives from the fact that the study was designed primarily to improve vocational decision-making, and that reinforcement techniques were implemented in terms of decision-making responses rather than need-achievement responses. It is suggested that in future research, comparison of students' need achievement be made between students in groups in which counselor reinforcement is given for positive need-achievement responses with students in groups for which counselor reinforcement for these responses is withheld. It is also possible that the simulation materials might be prepared especially to give a model of need-achievement. In this study, the simulation materials were prepared on the basis of normative data of students in the school setting, rather than designed intentionally to portray selected student characteristics.

b. The study indicated that students in the reinforcement groups with simulation materials and those in reinforcement groups without simulation materials developed more adequate self concepts than students in the other treatments. Since the construct of adequate self concept derived from a preconceived definition of adequate, adjusted personality, it is suggested that the development of adequate self concepts in the reinforcement groups derives from a conceptualization of "adequate self concept" as including "sound vocational decision making." In the profile of adequate self concept, vocational decision making constitutes an essential component. Therefore, as students in the reinforcement counseling groups and simulation-reinforcement groups improved in their vocational decision-making, they were at the same time moving nearer to the idealized "adequate self concept."

c. The failure to find the developmental program entirely effective for overcoming learning deficiencies is attributed in part to a time factor. It is suggested that one quarter probably is not sufficient time in which to provide adequately the learning experiences requisite for overcoming years of accumulated learning deficits. It was found that study skills could be improved significantly in one quarter. However, it well might be that it would take that long to get the students ready to use study skills efficiently in overcoming deficits in the basic education courses. It is suggested that research is needed to identify parameters of effective developmental courses, including time variable, for helping students overcome learning deficits.

This study demonstrated the potential of using reinforcement counseling techniques and simulation materials to improve vocational decision-making of community college youth. The study points to the viability of planned vocational guidance programs in post-secondary schools, and suggests that the planned approach, integrating instruction and guidance, is superior to providing segmented guidance services, including occupational information, testing, and individual counseling.

The vocational guidance program tested experimentally in this investigation can be implemented in a post-secondary school with a minimum of expense and without appreciable investment of professional staff time. It is suggested that counselors can prepare simulation profiles in terms of student populations of any given region. Given minimum training and prepared counseling packets, it is suggested that counselors can plan and direct effective vocational guidance programs, can implement counseling roles involving planned cueing and reinforcing and use of simulation materials; thereby, helping to increase students' knowledge of sources of occupational information and personal data, and improving their vocational decision-making.

VI. Summary

A. Problem

This study was concerned with evaluating a planned vocational guidance program incorporating instructional and counseling components in a community college setting. Primary purpose of the guidance program was to improve occupational choice-making of post high school youth. The investigation tested effects of reinforcement counseling techniques on vocational decision-making of community college youth; and evaluated simulation materials for vocational guidance of community college youth.

The theoretical frame of reference within which the study was developed derived from a set of assumptions in which occupational choice-making was seen as involving information-seeking, deliberating, and deciding components; and sound decision-making was conceptualized as a process involving gathering and selecting of information, consideration of alternatives in terms of consequences, and final choice-making on basis of probability of success and satisfaction. Reinforcement counseling techniques and simulation materials were considered potentially viable for modifying decision-making behavior of post high school youth.

B. Objectives

The study tested the following research hypotheses:

Hypothesis 1. Reinforcement counseling techniques are effective for improving students' vocational decision-making.

Hypothesis 2. Reinforcement counseling techniques are effective for helping students acquire knowledge of sources of personal data and occupational information.

Hypothesis 3. Simulation materials are effective in improving students' vocational decision-making.

Hypothesis 4. Simulation materials are effective for helping students acquire knowledge of sources of occupational information.

The study also sought to answer research questions relating to evaluation of a planned occupational guidance program for the community college. (1) What are effects of the program on increasing need-achievement of students? (2) What are effects of the program on improvement of students' self concept? (3) What are effects of a developmental program on overcoming students' learning deficits?

C. Methods

The study was conducted in a naturalistic setting. Regular counseling staff implementing the counseling role, were given pre-service and continuing in-service training. Counselor packets were used to standardize techniques. Reinforcement counseling and simulation materials were primary independent variables in the study. Vocational decision-making and knowledge of sources of personal data and occupational information were major dependent variables in the study. A posttest control group design was implemented including active and inactive control groups with Ss assigned randomly to treatment conditions. In testing major hypotheses analysis of variance techniques were employed to determine if statistically significant differences on criterion test scores obtained. Control over learning variables was implemented by restricting the population to students whose scores on college entrance scholastic aptitude tests fell below fiftieth percentile and by enrolling all Ss in a common instructional program to overcome learning deficiencies. Control over initial decision-making behavior was gained through limiting population to students whose educational plans and occupational choices were not definitely decided. All Ss were enrolled in a core program providing for testing and test interpretation; dissemination of occupational information; and study in basic education subject areas.

Population for the study consisted of students enrolled in the community college whose verbal and quantitative scores on college entrance examination (SCAT, ACT) fell below fiftieth percentile and who had not made firm vocational choices. A one-hundred percent sample was used in the study with students assigned randomly to treatment conditions. Of 333 students drawn for the study, there was an attrition of 33, leaving a total of 300 students participating in the project. Ss were assigned to five treatment conditions as follows: (1) Reinforcement Counseling Groups (RCG) including counselor cueing and reinforcement of selected vocational decision-making responses; (2) General Counseling Groups (GCG) in which counselor withheld cues and reinforcers for vocational decision-making responses and students meeting in counseling groups read and discussed general vocational guidance materials; (3) Simulation Reinforcement Groups (SRG) in which counselor used planned cueing and reinforcing and groups worked on simulation tasks, planning the life of simulated students similar to the general student population of the region; (4) Self Exploratory Groups (SEG) in which counselor provided groups with self exploratory pamphlets and fill-in exercises designed to help them plan their own life; and (5) Inactive Control, students receiving individual counseling only. All students participating in group counseling met in counseling groups weekly, for fifty-minute sessions. Each group consisted of 7 to 10 students and counselor. A set of topics was used for all groups, with each topic relating to the teaching of occupational decision-making. Groups met for ten consecutive weeks. Following final session criterion tests were administered. Analysis of variance was primary statistical technique used in treating data.

D. Results

The results from this study support the hypothesis that vocational decision-making of community college youth can be improved by use of reinforcement counseling techniques with small groups of students. Partial support was found for the hypothesis that reinforcement counseling can help students become aware of the sources of occupational information and personal data needed for vocational decision-making. Results supported the hypothesis that simulation materials are effective for improving students' vocational decision-making. Partial support was found for the hypothesis that simulation materials are effective for helping students acquire knowledge of sources of occupational information and personal data needed for vocational decision-making. The extent to which support of the research hypotheses was qualified by findings of this study is indicated in the following summary of results in relation to study predictions:

Prediction 1, that Ss in reinforcement counseling groups would score higher than Ss in general counseling groups or Ss in active control on vocational decision making criterion test was confirmed.

Prediction 2, that Ss reinforcement counseling groups would score highest; Ss in general group counseling would score next highest;

and Ss in inactive control would score lowest on vocational decision making criterion test was confirmed.

Prediction 3, that Ss in reinforcement counseling groups would score higher on occupational information inventory than Ss in counseling groups without reinforcement counseling and Ss in inactive control was confirmed.

Prediction 4, that Ss in reinforcement counseling groups would score highest; Ss in general group counseling would score next highest; and Ss in inactive control would score lowest on information inventory was not confirmed.

Prediction 5, that Ss in counseling groups using simulation materials and counselor reinforcement would score higher on vocational decision test than Ss receiving counselor reinforcement without simulation materials was confirmed.

Prediction 6, that Ss in counseling groups using simulation materials and counselor reinforcement would score higher on vocational decision test than Ss in counseling groups using self exploratory materials, Ss in general counseling groups with no special materials, or Ss in inactive control was confirmed.

Prediction 7, that Ss in counseling groups using simulation materials with counselor reinforcement would score higher on test of knowledge of sources of personal data and occupational information than Ss in groups receiving reinforcement without simulation materials was not confirmed.

Prediction 8, that Ss in counseling groups using simulation materials and counselor reinforcement would score higher on knowledge of sources of personal data and occupational information than Ss in counseling groups using self exploratory materials, Ss in general counseling groups, and Ss in inactive control was confirmed.

Data gathered to answer secondary research questions relating to evaluation of the experimental guidance program revealed the following:

1. The Ss failed to increase in need-achievement, as measured by need-achievement score on Edwards Personal Preference Schedule.

2. Ss in the reinforcement counseling groups developed more adequate self concepts, as measured by index of similarity

with adjusted personality on California Q-Sort, than Ss not receiving counselor reinforcement.

3. Ss improved in study skills, but failed to improve in basic communication skills.

E. Conclusions and Implications

On the basis of results from this investigation the major hypotheses were supported, providing basis for the following conclusions:

1. Reinforcement counseling techniques are effective for improving vocational decision making of community college youth. Students receiving counselor reinforcement acquired knowledge of sources of information about personal data and occupational information and developed vocational decision-making skills. Students demonstrated ability to make logical plans and realistic vocational choices at the end of the treatment.

2. Simulation materials are effective for improving vocational decision making of community college youth. Students participating in counseling groups in which simulation materials were used demonstrated ability to make logical educational plans and sound vocational decisions, following treatment. The simulation materials were found to be superior to self-exploratory materials and general vocational guidance materials.

The most effective vocational guidance approach was found to be the combination of reinforcement counseling and simulation materials.

This study has implications for guidance personnel in post-high school institutions. The investigation demonstrated the potential worth of a planned vocational guidance program, integrating instruction and guidance components, and including use of reinforcement counseling techniques and simulation materials. The experimental program which incorporated in a coordinated package testing, counseling and occupational information services was found to be effective for improving occupational choice-making of community college youth. It is suggested that such a program has the added advantage of economic efficiency. It is suggested that findings from the study also have implications for guidance personnel in secondary schools.

The following recommendations are predicated on findings from this study:

1. Guidance and instruction should be integrated rather than treated as discrete components of the educational process in planning and implementing learning experiences to teach vocational decision-making.

2. Testing, counseling and occupational information services should be developed and implemented as related services designed to achieve specific outcomes, including student vocational decision-making.

3. The role of counselor in the community college setting should be redefined, taking into account counseling goals on the one hand, and inputs on the other, such as reinforcement techniques, computer operations, simulation materials.

4. Further testing of simulation materials should be accomplished, and guidelines for developing materials with different populations should be developed.

5. Further research should be conducted to identify and test variations of simulation experiences and materials for teaching sound occupational decision-making to children, youth and adults at all ages from different socio-economic-cultural backgrounds.

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APPENDICES

APPENDIX A

Table 2. Initial Assignment of Ss and Attrition by Treatment Condition

Treatment	Size of Sample Original Sample	 Attrition	 N
Reinforcement Counseling Groups	83	11	72
Simulation Reinforcement Groups	49	4	45
Self Exploratory Counseling Groups	46	3	43
General Counseling Groups	69	9	60
Individual Counseling Control	86	6	80
Total	333	33	300

APPENDIX B

Counselor Packet (Simulation Reinforcement Group)

DECISION PROJECT
BLUE MOUNTAIN COMMUNITY COLLEGE-PENDLETON, OREGON

SCHEDULE FALL TERM, 1966

Week	Date	Activity
1	9/26	Registration. Overview of Project
	9/27	Lecture: Orientation G 1
	9/28	Discussion
	9/29	Lecture: Decision-making G 2
2	10/3	Pre-testing: Personal Inv. EVI, Occ. Info. Inv.
	10/4	Small group sessions: Instructions
	10/5	Small group sessions: Instructions
	10/6	Q-Sort (discussion and interpretation at post-testing) Autobiography assigned as home task
3	10/10	Testing EPPS
	10/11	Small group decision session (1) Sections AB
	10/12	Small group decision session (1) Sections CD
	10/13	Interpretation of EPPS, occupational information
4	10/17	Testing: Kuder Vocational
	10/18	Small group decision session (2) Sections AB
	10/19	Small group decision session (2) Sections CD
	10/20	Interpretation of Kuder Vocational, occupational information
5	10/24	Testing: Kuder Personal
	10/25	Small group decision session (3) Sections AB
	10/26	Small group decision session (3) Sections CD
	10/27	Interpretation of Kuder Personal, occupational information
6	10/31	Testing GATB
	11/1	Small group decision session (4) Sections AB
	11/2	Small group decision session (4) Sections CD
	11/3	Interpretation of GATB
7	11/7	Testing GATB
	11/8	Small group decision session (5) Sections AB
	11/9	Small group decision session (5) Sections CD
	11/10	Interpretation of GATB, occupational information

DECISION PROJECT
BLUE MOUNTAIN COMMUNITY COLLEGE–PENDLETON, OREGON

SCHEDULE FALL TERM, 1966

Week	Date	Activity
8	11/14	Testing GATB
	11/15	Small group decision session (6) Sections AB
	11/16	Small group decision session (6) Sections CD
	11/17	Interpretation of GATB Discuss occupational information
9	11/21	Speaker: Occupational information
	11/22	Small group decision session (7) Sections AB
	11/23	Small group decision session (7) Sections CD
	11/24	HOLIDAY (THANKSGIVING)
10	11/28	Testing IQ
	11/29	Small group decision session (8) Sections AB
	11/30	Small group decision session (8) Sections CD
	12/1	Interpretation of IQ Relate to aptitude and achievement tests, occupational information
11	12/5	Q-sort
	12/6	Post testing Personal Inv. EVI, Occupation Information
	12/7	Interpretation of Q-sort. "My Plans for the Next 10 years" (task)
	12/8	Final class session. Summary.
	12/12 to 12/15	(Final Examination Week) Makeup for any tests or tasks missed during term.

DECISION PROJECT
BLUE MOUNTAIN COMMUNITY COLLEGE—PENDLETON, OREGON

A-1: BACKGROUND

Each year millions of students finish high school and step out into the world of work only partially prepared. Rosen (1966) reported that between fifty and sixty percent of twelfth grade students in 1960 had not engaged in career planning during their final year in high school.

It is agreed that there is a growing need for students to develop decision-making behavior patterns. The studies of Garfinkle and Wrenn concluded that yough entering the labor force in the 1960's will change employers during their working lives between five and seven times. With each change, there is need for realistic vocational decision-making.

Finding effective methods for improving vocational decision-making behaviors of youth constitutes a challenge to educators. In an attempt to meet this challenge, a research project to improve vocational decision-making of community college youth will be undertaken at Blue Mountain Community College, Pendleton, Oregon, in October, 1965.

Students will be enrolled in a Psychology Laboratory in which they will be given information about themselves, through testing and test interpretation; and the world of work, through career information materials, films, and speakers. The students will participate in sessions once a week to talk about selected occupational-choice topics.

A-2: PURPOSE

The main purpose of the Blue Mountain Vocational Decision-Making Project is twofold. The primary aim is to improve vocational choice-making of community college students. A secondary aim is to improve vocational-technical curricula in the community college.

The specific objectives of the Decision-Making Project are related to the aims. They are (1) to increase students' self understanding; (2) to increase students' information about educational and occupational opportunities; and (3) to improve students' ability to make realistic vocational and educational decisions.

A-3: ORGANIZATION

On Mondays and Thursdays students will meet in large groups to gain information about themselves and world of work. On Monday (a) tests will be administered; (b) interpretations will be made on Thursday and/or information about occupational opportunities will be given.

Decision-making groups will be held once a week, on Tuesday or Wednesday, each quarter. Each group will consist of eight to ten students and a counselor.

Throughout the quarter the decision-making groups will meet regularly once a week. Each session will be 50-minutes in length.

Counselors conducting the weekly sessions, using the special counseling techniques, will have pre-service and in-service training in special techniques to be used in the project.

A-4: INSTRUCTIONS TO COUNSELORS

1. Have students who want to participate in the Project sign the Participant Agreement (B-1). Have all students who want to participate sign the Agreement form, even though your group will have only seven to ten members. Turn in B-1 form to Mr. Donald Amsberry.

2. Administer pre-tests. See special instructions for testing. Be sure that all answer sheets have identification data, including

name of person taking test and date. Announce to students prior to testing that the purpose of testing is to get information about the individual's strengths, weaknesses, individual needs which help the person gain greater self-understanding. Turn in tests to Mr. Donald Amsberry.

3. Complete Study Group Data Sheet (B-2). This information must be correct as this will be used to make up study group rosters. DO NOT USE NICKNAMES. FILL IN FULL NAME, INCLUDING MIDDLE NAME, OF EACH PERSON IN YOUR GROUPS. Turn in to Mr. Donald Amsberry.

4. Send reminder to each participant.

5. Tape record counseling sessions. (See E-1). LABEL TAPES CLEARLY. IDENTIFY TAPE BOX BY RESIDENCE, COUNSELOR, QUARTER, YEAR. AT START OF EACH COUNSELING SESSION, RECORD: "This is (your name)'s decision group. Blue Mountain Community College. Session Number___."

6. Fill in Attendance Record (E-2) for each meeting. If reason for absence is known, indicate reason on record.

7. Conduct small group sessions. Use counseling technique assigned. Instructions for counseling procedures for each session are in packet (F1-F7). Do not change technique during quarter.

8. Administer questionnaires and inventories at end of project. There are special instructions for test administration. Be sure names are on all answer sheets. Turn in all tests and answer sheets to Mr. Donald Amsberry.

9. RETURN PACKET TO MR. DONALD AMSBERRY. Before returning packet, complete check list, Columns 1 and 2 on packet cover. Be sure packet is complete. Include tape recordings of sessions in packets.

IDENTIFICATION

Address ____________________

Counselor ____________________

Date ____________________

B-1: PARTICIPANT AGREEMENT

Fill in ID Section.

RETURN COMPLETED FORM TO MR. DONALD AMSBERRY.

Blue Mountain Community College has been selected to participate in the Special Decision-Making Project. The Decision-Making Project aims to accomplish two goals (1) to develop a course in the community college to provide job information to students and help them gain greater understanding of themselves and (2) to improve their occupational choice-making. It is expected that added outcomes of the Decision-Making Project will be a feeling of satisfaction and enjoyment which will come from weekly meetings. Decision-Making groups will meet throughout the quarter. On Mondays and Thursdays there will be general sessions. On Tuesday or Wednesday a 50-minute small group decision session will be held. In general sessions you will have a chance to get information about occupations and to learn more about yourselves.

In the small group sessions you will have special projects concerned with making life plans.

If you want to participate in the Decision-Making Project, please sign the Participant Agreement form.

DECISION PROJECT
BLUE MOUNTAIN COMMUNITY COLLEGE–PENDLETON, OREGON

B-1: PARTICIPANT AGREEMENT

AGREEMENT

"I want to participate in the Blue Mountain Special Decision-Making Project. I agree to attend meetings regularly."

Name	Major	Grade Level	Address
Example: Richard Smith	Mech. Tech.	Fresh	601 Main Street

B-2: SMALL GROUP DATA SHEET

FILL IN INFORMATION AND RETURN IMMEDIATELY TO MR. DONALD AMSBERRY.

Date______________________________________

Address____________________________________

Counselor__________________________________

Phone No.__________________________________

Meeting time: Day______________Hour__________

Meeting place: Room__________________________

Complete the following for each participant

Name of Participant	Sex	Age	Yr in school 13, 14, 15, 16	High School	Major
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

C: REMINDER OF WEEKLY MEETINGS

Instructions. A reminder letter concerning the decision-making sessions should be sent to each participant before the first meeting.

Before sending letter, fill in name of participant, time, and place of meeting, and sign the letter.

Dear

The first meeting of the Blue Mountain Community College Decision-Making Group will be held this week.

We will have meetings each week throughout the quarter. Your goal is to become better able to make realistic vocational decisions for yourself. You will discover sources of information about occupations, and gain a better understanding of yourself. At the end of the project you will know how to make good decisions and how to plan ahead for 4 to 5 years.

I'll see you at the meeting. Time , Date
Place

Sincerely,

Counselor

D-1: COUNSELING DECISION-MAKING SESSION: STRUCTURE

Each session has three parts:

1. Opening	**(2-5 minutes) Counselor informally greets participants. ESTABLISHES RAPPORT.**
2. Counseling	**(40 minutes. Watch timing. This should be exact.) Counselor uses counseling technique outlined in packet.**
3. Closing	**(2-5 minutes) Counselor closes session. Purposes of closing are to terminate session and to give participants feeling of satisfaction.**

E-1: COUNSELING TECHNIQUE: DECISION-MAKING GROUP (E)

Counselor DOES NOT tell participants what to do. Counselor encourages participants to talk. Counselor encourages through warm, understanding attitude. Counselor lets participants know he is interested in them. Counselor maintains non-judgmental atmosphere.

Counselor role is to provide information requested, give reinforcement for decision-making responses in which participants refer to (a) need for information, sources of information, or other information-seeking activities; (b) need to weigh information, considering alternatives and consequences of different alternatives; (c) need to make final decision on basis of having weighed alternatives and picked one that seems to offer greatest probability of success and satisfaction.

E-1: COUNSELING TECHNIQUE: DECISION-MAKING PROJECT

1. Typical Student Task Problem

During each meeting, students are to make decisions concerning the future of typical students like themselves. As the students make decisions concerning the person's course of action, the counselor reinforces good decision-making responses.

Counseling - During the first session the counselor indicates to the group that they will be helping to plan the life of an individual for the next four years after high school. They will get to know him, his likes and dislikes, his background, his abilities. As they plan his life, they will begin to consider alternatives which occur each time a decision is made.

During each session the students in the group will work together to make life decisions for a student described on Profile Sheet (Section E-2). The students will discuss alternatives and consequences of decisions. Students will receive 5 profiles during the term.

During the session counselor will reinforce if they use good decision-making techniques. He will give information concerning consequences if they ask.

2. Counselor gives encouragement to participants who mention good decision-making techniques.

During group session counselor responds to every participant statement referring to good decision-making by expressing counselor approval. A favorable decision-making response would be any statement relating to (1) the need for relevant information; (2) the gathering of information; (3) sources of information; (4) considering or thinking about relevant information; and (5) deciding on the basis of considered information.

Counselor encouragement responses should be made conversationally, and should be responses, such as:

"Great idea"
"Sounds fine to me"
"That sounds great"
"Good"
"Wonderful"
"Hm mmm"
"I think that's a great idea"

Counselor does NOT respond to any remark of participant referring to negative decision-making. If participant suggests a decision which appears to be "snap judgment" rather than based on consideration of information and consequences, counselor says NOTHING to student making the response. Counselor redirects group by giving cue to another group member.

Counselor gives cues to elicit responses relating to decision-making. Cues are leading questions, such as "Where do you think (Name of Profile Student) might find information about job openings in this area?"

E-1a: COUNSELING SESSION CLOSING: DECISION-MAKING GROUP

Counselors use same closing for all sessions except last one.

Allow two to five minutes for termination of session. Closing should break into the counseling period, even if there are unfinished items or discussion in progress.

Closing should accomplish the following:

1. Bring session to halt.
2. Give encouragement to participants.
3. Leave participants with desire to come back.

Individual variation may be used in closing sessions. However, each closing should follow the same general pattern and include the following:

1. Bring session to halt. Say, "Oh, I see our time is up for today." "I'm sorry to break in, but I see our time is up today."

2. Reminder of next week.

   "See you next week."
   "We should have a good session next week."
   "I'll be seeing you next week."

3. Give cue for student follow-through during the week.

   "Some of the things we talked about today in planning Profile Student's life apply to the decisions you will be making about your own lives. See how many of the activities and ideas we talked about in planning (Profile Student)'s life you can use yourselves next week. O.K.? We'll talk about this next week again."

PROFILE STUDENT (1)

DECISION PROJECT
BLUE MOUNTAIN COMMUNITY COLLEGE-PENDLETON, OREGON

E-1b ELIZABETH BROWN

Elizabeth Brown is 18 years old. She is 5 ft. 2 in. tall, weighs 112 lbs., has blue eyes and light brown hair. She is a pretty girl, neat appearing, and has good health. She graduated from high school in June.

Her favorite subject in high school was music. She also liked typing. She studied violin in the school program since she was in sixth grade. Elizabeth likes to listen to popular records.

The combined family income for Elizabeth's parents is $6,800. Her father has been a door-to-door salesman most of his working life. He is now selling Snap On Tools. Elizabeth's mother is a practical nurse. Elizabeth has four sisters, aged 16, 14, 11 and 10.

Elizabeth does not date very much. She has worked since she was fourteen, babysitting, beanpicking and berry picking. She does not know what to do now--go to school some more or what?

PROFILE STUDENT (1) page 2

STUDENT FACT SHEET

Name Elizabeth Brown

Kuder Vocational
Percentile

9	Outdoor
36	Mechanical
28	Computational
59	Scientific
55	Persuasive
15	Artistic
10	Literary
96	Musical
81	Social Service
47	Clerical

General Aptitude Test Battery
Percentile

48	General Learning Ability
35	Verbal Aptitude
18	Numerical Aptitude
48	Spatial Aptitude
28	Form Perception
67	Clerical Perception
82	Motor Coordination
94	Finger Dexterity
85	Manual Dexterity

American College Test
Percentile

4	English Usage
6	Mathematics Usage
1	Social Science Reading
9	Natural Science Reading
2	Composite

My Vocational Choice

1. I don't know
2.
3.
4.

Kuder Personal
Percentile

82	Group Activity
78	Stable Situations
14	Dealing with Ideas
82	Avoiding Conflict
65	Directing Others

Edwards Preference Schedule
Percentile

25	Achievement
60	Deference
80	Order
29	Exhibition
15	Autonomy
90	Affiliation
22	Intraception
72	Succorance
40	Dominance
38	Abasement
27	Nurturance
78	Change
50	Endurance
31	Heterosexuality
28	Aggression

Otis Quick Scoring Mental Ability
99

Average High School Grades

C	English, 4 yrs		Auto Mech.
C	History, 2 yrs	C	P.E., 4 yrs
D	Mathematics 1 yr (general)		Agric.
C	Science, gen.	C	Health Occ. 1 yr
B	Typing, 2 yrs	A,C	Music, Art 3 yrs, 2 yrs
	Bookkeeping	C	Home Ec, 2 yrs
	Shorthand		Dis. Ed. / Div. Oc.
	Wood, Metal, Plastics		

PROFILE STUDENT (2)

DECISION PROJECT
BLUE MOUNTAIN COMMUNITY COLLEGE-PENDLETON, OREGON

E-1c RONALD CLARK

Ronald Clark is 18 years old. He is 5 ft. 8 in. tall and weighs 150 lbs. Ronald is a personable young man, and in good health. He wants to be a doctor. He idolizes Ben Casey and Dr. Kildare.

Ronald graduated from high school in June. He did not work during the summer. He spent a lot of time watching TV. He always has liked TV. Ronald never has had any work experience.

Ronald is an only child. His father has been employed in custodial work since Ronald was born. Ronald's father now is working in the community hospital. Ronald's mother has done seasonal cannery work. Ronald's father completed high school. Ronald's mother dropped out of school at sixteen. The combined family income is $6,000 a year. Ronald's parents are pressuring him to be a doctor. Ronald doesn't know where to go to school this fall.

PROFILE STUDENT (2) page 2

STUDENT FACT SHEET

Name Ronald Clark

Kuder Vocational
Percentile

58	Outdoor
60	Mechanical
28	Computational
39	Scientific
78	Persuasive
2	Artistic
26	Literary
20	Musical
52	Social Service
57	Clerical

General Aptitude Test Battery
Percentile

54	General Learning Ability
54	Verbal Aptitude
64	Numerical Aptitude
40	Spatial Aptitude
67	Form Perception
62	Clerical Perception
29	Motor Coordination
53	Finger Dexterity
93	Manual Dexterity

American College Test
Percentile

24	English Usage
14	Mathematics Usage
27	Social Science Reading
39	Natural Science Reading
21	Composite

My Vocational Choice

1. Doctor
2.
3.
4.

Kuder Personal
Percentile

66	Group Activity
49	Stable Situations
78	Dealing with Ideas
5	Avoiding Conflict
42	Directing Others

Edwards Preference Schedule
Percentile

32	Achievement
40	Deference
18	Order
98	Exhibition
22	Autonomy
72	Affiliation
69	Intraception
42	Succorance
81	Dominance
19	Abasement
37	Nurturance
17	Change
78	Endurance
61	Heterosexuality
77	Aggression

Otis Quick Scoring Mental Ability
109

Average High School Grades

D	English, 4 yrs		For. Lang.
D	History, 2 yrs	C	Auto Mech 2 1/2 yrs
D	Mathematics 2 yrs	A	P.E., 4 yrs
D	Science (general) 1 yr		Agric.
D	Typing, 1/2 yr	B	Speech, Drama 2 yrs
	Bookkeeping	C	Health, 1 yr
	Shorthand		Home Ec.
	Music, Art		Dis. Ed/ Div. Oc.
B,B	Wood, Metal, Plastic, 2 yrs		

PROFILE STUDENT (3)

DECISION PROJECT
BLUE MOUNTAIN COMMUNITY COLLEGE–PENDLETON, OREGON

E-1d JOHN LARSON

John Larson is 18 years old. He is 6 ft. tall, weighs 140 lbs., and wears glasses. John graduated from high school in June. He has three brothers, aged 21, 14 and 7 and two sisters, aged 19 and 11. John's father is principal of the high school. His mother works as a typist in one of the local churches. The combined family income for John's parents is $13,000. John's parents want all the children to have post high-school education. John's older brother has been going to Washington State University for the last three years on a scholarship. John's older sister completed her freshman year at Blue Mountain last June.

During the last two years he was in high school, John held a part time job in a supermarket. He liked the work there. John has been dating a girl in his class. John spends a lot of time tinkering with radios. He doesn't read very much.

PROFILE STUDENT (3) page 2

STUDENT FACT SHEET

Name John Larson

Kuder Vocational

Percentile	
22	Outdoor
78	Mechanical
85	Computational
53	Scientific
50	Persuasive
18	Artistic
21	Literary
14	Musical
45	Social Service
42	Clerical

General Aptitude Test Battery

Percentile	
58	General Learning Ability
18	Verbal Aptitude
64	Numerical Aptitude
93	Spatial Aptitude
71	Form Perception
69	Clerical Perception
86	Motor Coordination
57	Finger Dexterity
19	Manual Dexterity

American College Test

Percentile	
13	English Usage
40	Mathematics Usage
10	Social Science Reading
27	Natural Science Reading
19	Composite

My Vocational Choice

1. ?
2.
3.
4.

Kuder Personal

Percentile	
27	Group Activity
69	Stable Situations
55	Dealing with Ideas
82	Avoiding Conflict
39	Directing Others

Edwards Preference Schedule

Percentile	
33	Achievement
48	Deference
79	Order
9	Exhibition
28	Autonomy
38	Affiliation
62	Intraception
64	Succorance
39	Dominance
24	Abasement
36	Nurturance
25	Change
89	Endurance
17	Heterosexuality
32	Aggression

Otis Quick-Scoring Mental Ability

111

High School Grades

C	English, 4 yrs		For. Lang.
C	History, 2 yrs		Auto. Mech
C	Mathematics, 2 yrs	C	P.E., 4 yrs
C	Science, 1 yr		Agric.
C	Typing, 1 yr		Health Occ.
			Home Ec.
C	Bookkeeping, 1 yr	B	Dis. Ed./ Div. Occ., 2 yrs
	Shorthand		
B,B	Music, Art		
B,B	Wood, Metal, Plastic, 1 1/2 yr		

PROFILE STUDENT (4)

DECISION PROJECT

BLUE MOUNTAIN COMMUNITY COLLEGE–PENDLETON, OREGON

E-1e

URIA FOX

Uria Fox is 18 years old. He is 5 ft. 11 in. tall; weighs 195 lbs. He is in excellent physical condition. Uria graduated from high school in June and has been working at home during the summer with his step-father. Uria lives with his parents and half-sister about ten miles out of town on a small farm. Uria's half sister is in the first grade. Uria's mother was born on an Indian reservation. Uria's father died when Uria was eight years old. His mother remarried when Uria was ten, at which time Uria and his mother went to live on his step-father's farm. Uria's mother never has worked outside the home.

Uria's hobbies are sports, bulldogging and horses. He was on the football team in high school and made a name for himself. He doesn't know what he wants to do now.

PROFILE STUDENT (4) page 2

STUDENT FACT SHEET

Name Uria Fox

Kuder Vocational
Percentile

40	Outdoor
5	Mechanical
33	Computational
85	Scientific
76	Persuasive
22	Artistic
15	Literary
30	Musical
68	Social Service
63	Clerical

General Aptitude Test Battery
Percentile

48	General Learning Ability
46	Verbal Aptitude
39	Numerical Aptitude
78	Spatial Aptitude
68	Form Perception
70	Clerical Perception
84	Motor Coordination
28	Finger Dexterity
88	Manual Dexterity

American College Test
Percentile

2	English Usage
14	Mathematics Usage
10	Social Science Reading
9	Natural Science Reading
4	Composite

My Vocational Choice

1. College
2. __________
3. __________
4. __________

Kuder Personal
Percentile

86	Group Activity
66	Stable Situations
15	Dealing with Ideas
13	Avoiding Conflict
79	Directing Others

Edwards Preference Schedule
Percentile

20	Achievement
18	Deference
65	Order
95	Exhibition
12	Autonomy
76	Affiliation
27	Intraception
60	Succorance
70	Dominance
40	Abasement
22	Nurturance
10	Change
58	Endurance
79	Heterosexuality
68	Aggression

Otis Quick Scoring Mental Ability
104

Average High School Grades

D	English, 4 yrs
C	History, 2 yrs
B	Mathematics, 1 yr
C	Science 2 yrs
D	Typing
	Bookkeeping
	Shorthand
C	Music, Art, 1/2 yr
B,B B	Wood, Metal, Plastics, 3 yrs
	For. Lang.
C	Auto. Mech., 1/2 yr
A	P.E., 4 yrs
B	Agric, 2 yrs
C	Health Occ., 1 yr
	Home Ec.
	Dis. Ed./ Div. Occ.

PROFILE STUDENT (5)

DECISION PROJECT
BLUE MOUNTAIN COMMUNITY COLLEGE–PENDLETON, OREGON

E-1f CHARLES PHILLIPS

Charles Phillips is 18 years old. He is 5 ft. 10 in. and weighs 160 lbs. He has brown hair. He is in good physical condition except for flat feet. Charles' father owns a bar and grill in town. Charles has a twin sister, Marilyn.

Their parents hope to have both Charles and Marilyn go to college, eventually becoming partners in the business. Charles' parents do not seem to care what he studies in colleges. It is the idea of going.

Charles likes to work on cars in his spare time. He enjoys taking them down and rebuilding them. He is serious about Jane Ellis, and plans to marry her. Jane is going to Blue Mountain this fall.

PROFILE STUDENT (5) page 2

STUDENT FACT SHEET

Name Charles Phillips

Kuder Vocational

Percentile	
28	Outdoor
58	Mechanical
63	Computational
83	Scientific
30	Persuasive
19	Artistic
29	Literary
15	Musical
29	Social Science
47	Clerical

General Aptitude Test Battery

Percentile	
39	General Learning Ability
35	Verbal Aptitude
46	Numerical Aptitude
76	Spatial Aptitude
58	Form Perception
62	Clerical Perception
60	Motor Coordination
86	Finger Dexterity
54	Manual Dexterity

American College Test

Percentile	
4	English Usage
6	Mathematics Usage
1	Social Science Reading
5	Natural Science Reading
2	Composite

My Vocational Choices

1. ?
2. __________
3. __________
4. __________

Kuder Personal

Percentile	
40	Group Activity
19	Stable Situations
40	Dealing with Ideas
75	Avoiding Conflict
26	Directing Others

Edwards Preference Schedule

Percentile	
24	Achievement
27	Deference
92	Order
37	Exhibition
17	Autonomy
54	Affiliation
52	Intraception
25	Succorance
13	Dominance
50	Abasement
13	Nurturance
93	Change
80	Endurance
98	Heterosexuality
9	Aggression

Otis Quick Scoring Mental Ability

105

Average High School Grades

D	English, 4 yrs
C	History, 2 yrs
C	Mathematics, 2 yrs
C	Science, 2 yrs
D	Typing, 1/2 yr
C	Bookkeeping, 1 yr
	Shorthand
C	Music, 2 yrs
D	Art, 1/2 yr
	Wood, Metal, Plastic
	For. Lang.
D	P.E., 4 yrs
B	Auto. Mech., 2 yrs
	Agric.
	Health
	Home Ec.
	Dis. Ed.

E-1g UNPLANNED EVENTS

Student's father is in automobile accident, hospitalized and unable to work for several weeks.

Student loses part-time job.

Student's parents get a divorce.

Student gets reclassified 1A.

Student gets mononucleosis.

Student's mother announces to family that she is pregnant.

F-1: RECORDING STUDY GROUP SESSION:

1. Tape record all sessions. Check out and return recorder promptly at end of session, as other counselors in your school will be using the same recorder.

   CLEARLY LABEL TAPE BOX AND INTRODUCE EACH SESSION BY IDENTIFYING COUNSELOR, SESSION NUMBER.

2. Additional tapes may be obtained from Mr. Donald Amsberry. At end of project, put completed tapes in Packet to be returned to Mr. Donald Amsberry.

DECISION PROJECT
BLUE MOUNTAIN COMMUNITY COLLEGE–PENDLETON, OREGON

Address ______________________
Counselor ______________________
Quarter/Year ______________________

F-2: ATTENDANCE RECORD

Complete Identification Section

Participant (Full Name)	Meeting													
1.														
2.														
3.														
4.														
5.														
6.														
7.														
8.														
9.														
10.														

FILL IN RECORD BY MARKING "A" WHEN ABSENT, P WHEN PRESENT.

RETURN THIS FORM IN PACKET AT END OF PROJECT.

IF REASON FOR ABSENCE IS KNOWN, PLEASE INDICATE IN BOX OR EXPLAIN BELOW.

G-1: DISCUSSION LESSION GUIDELINES

Counselor may use individual approach to establish rapport. In the two to five minutes set aside for opening, counselor should accomplish the following:

1. Make members feel comfortable and at ease.
2. Introduce members. If the group is made of participants who do not know each other, ask them to tell something about themselves (hobby, hometown, etc.)

Counselor introduces the students to the decision-making concept by telling them a little bit about the Project, about the decisions that they will be making for typical students, and the personal benefits that they can hope to get from the project.

Counselor then leads a discussion concerning decision-making.

I. General discussion about the future. Begin with discussing such things as:

  a. What are their parents doing? Father's occupation, etc.
  b. How much education does each of them have?
  c. What do they feel caused their parents to make the decisions they did, in deciding on occupations, where to live, whom to marry.
  d. What have their brothers and sisters done, if they are older than the student?
  e. What have some of their older friends done in school or after?
  f. What job opportunities do they think are possible in their home town? In Oregon? In surrounding states?
  g. What things do they think will be different about their opportunities and the world from that which their parents experienced?

II. Future goals and values

  a. What does success mean to them?
  b. What are some of the things they plan to work for in their life time?
  c. What standard of living are they working to achieve?

G-1: DISCUSSION SESSION GUIDELINES

III. School plans

- a. What do they want to do while in school?
  - (1) get good grades? Why?
  - (2) get into school activities?
  - (3) change something about themselves?
- b. What is the most important thing they should think about in planning their school life?
- c. Who are the important people they should consider in making their plans?

IV. Decisions

- a. How much freedom do they feel they have to decide for themselves?
- b. What restrictions do they feel they have and from where do these restrictions come?
- c. What do they feel are society's expectations for them? What responsibilities do they have to their society and world.

G-2: SUGGESTED DECISION-MAKING LECTURE PATTERN

Planning one's life is quite a difficult task. It is difficult because there are so many factors that must be considered, so much information that must be considered, that frequently is unknown to us at the time we are called upon to make a decision. The more past experiences one has, the more information one has to use in making future decisions.

You face the task of choosing courses and planning generally what you'll be taking for the following years. You don't know how you'll change over the course of the next years. Some of your decisions will affect what you will become.

You don't know what kind of student you will be . . . what kind of courses you will find difficult or easy, what courses you will find interesting and exciting. You have some ideas based on what you've already experienced in school, but you're not very sure of the future.

There are actually two types of decisions . . . the immediate decision, perhaps sometimes considered to be insignificant and the long-range decision . . . those decisions which determine our goals and radically affect and change our lives. In your case, a long-range goal may be that which you plan to do when you graduate from school. The short term decision, or immediate decisions may be what you choose to take and do next year. What you do next year may affect what you are able to do when you graduate.

What we decide to do is based on what we want, what our goals are. The point is, we need a lot of information about what is available to us, what we want to end up with, what we're like as people, and how we differ from others and who are important in our lives, whose opinions and advice make a difference in what we decide. Sometimes we don't even know what information we need or where to get it, or what questions to ask to get the information.

During this term we are going to be concerned with finding out what we need to make good decisions . . . to find out where we can get this information . . . and how we can use it after we get it. You will then want to apply this to the immediate decision that you must make about next year.

G-3: EXPLAINING DECISION-MAKING SESSIONS E

COUNSELING

Counselor begins session by asking students what information they have gathered pertaining to the questions they were asked to investigate. Each student is allowed to tell what he found out about each question and to express his views.

Counselor explains the nature of the decision-making sessions to the students. Suggested points of discussion are:

1. We will be planning the life of typical students for the next four or five years.
2. We will get to know their backgrounds, abilities, interests.
3. In helping to make their plans, we will consider alternatives and consequences of each decision.
4. You will work as a group in making decisions for your typical student. You can ask Counselor for information relating to consequences of any course of action. Counselor has a pack of information cards to use in giving you this information. Counselor also has a few "unplanned events" to give from time to time, so students will have practice in dealing with chance situation.

G-4: SUMMARY DISCUSSIONS -- LAST SESSION

Discussion:

Counselor gives cue questions, making sure that everyone in the group has a chance to express his views.

Cue questions:

1. What did you enjoy most about this course?
2. What was most useful to you?
3. What were the good points of our group?
4. How would you add to or alter the project?
5. What was the "highlight" of this project for you?
6. How did this project influence your own decision-making?
7. What do you intend to do about making a life-plan for yourself?

G-5: LAST SESSION -- CLOSING

Be sure this session closes on a note of enthusiasm, warmth, and genuine good-feeling. Counselor should let his members know that he has enjoyed the weekly sessions. Counselor should let members know that he will continue to be interested in them.

Counselor should close meeting, telling members once again that they did have some very worthwhile ideas and that he has every belief in their success in the future.

Finally, counselor should suggest to students that they start working out a life-plan for themselves for the next four or five years, telling them that he will be glad to talk with them about setting up a plan for themselves--deciding on a "long-term goal," their occupation after school, and deciding on "short-term goals"--the educational plan they will need to get to the long-term goal.

APPENDIX C

CUES FOR ELICITING RESPONSES RELEVANT TO EACH COUNSELING SESSION

Directions: Counselor should phrase cue-questions according to student backgrounds and setting. Cues should be given conversationally, as questions which will elicit responses relating to the general cue-ideas stated below.

1. **Looking at the present: Orientation session**
   What kind of person are you?
   What kind of person do you want to be?
   Why did you come to a community college?
   What do you think of yourself at this time?
   What problems do you have?
   What are your long term goals?
   How do you decide on goals? (Personal factors/occupational information)

2. **Looking at yourself: Personal factors to consider in choosing a vocation**
   How do personal interests influence choice?
   How do personality characteristics choice?
   What about intelligence?
   What about health, physical characteristics?
   What about special aptitudes?

3. **Looking at the world of work: Occupational information to consider in choosing a vocation or looking at occupational areas (general orientation to importance of occupational information)**
   What vocational-technical opportunities are likely in this area?
   What are requirements for career entry in different jobs?
   What are chances of getting work in various jobs?
   What training or education is required for different jobs?
   What are the rewards: advancement, financial, security, transfer possibility, personal satisfaction?

4. **Finding out about oneself: Sources of information.**
   Where to find out about yourself?
   Test data: what do they mean?
   School records: what do they suggest?
   Self-evaluation: what do you think of yourself?
   Professional evaluation: what do others think?

5. **Finding out about the world of work and leisure: Sources of information.**
   Where to find out about the world of work and leisure?
   - **Library references.**
   - **Local resources.**
   - **Occupational files.**
   - **Employment office.**

6. **Considering occupational areas: Deliberating about alternatives.**
   How to relate personal information and occupational information.
   How to consider consequences of different alternatives.

7. **Considering educational and training programs for possible vocational choices.**
   Looking at personal characteristics.
   - **What learning problems do you have?**
   - **What special aptitudes, personality characteristics, and interests do you have?**

   Looking at educational and training programs.
   - **What are entrance requirements?**
   - **What is the cost?**
   - **What is availability of program?**

8. **Deciding on an immediate vocational goal.**
   What is your choice of an occupational goal?
   Why did you select this occupation?

9. **Deciding on an educational or training program to reach the vocational goal.**
   What kind of preparation do you need?
   Where can you get the training?

10. **Looking into the future.**
    What kind of person are you?
    What kind of person do you want to be?
    Do you belong in a big organization or a small one?
    Do you belong in a pressure-job?
    Do you belong in a job demanding careful, detailed work?
    Do you want to take risks and chances?
    How can you keep your career options open?
    What are your long term goals?
    How will you make decisions about work throughout your life?
    How can you find out about the need for making decisions to change your life plan?

APPENDIX D

TYPESCRIPT OF REINFORCEMENT COUNSELING GROUP SESSION

The following typescript constitutes a transcription of one small group counseling session in which the counselor used reinforcement counseling techniques. The group was made up of seven freshmen students enrolled in a community college. Six of the participants were male, and one was female. Four of the males were eighteen, one was seventeen and one was nineteen years of age. The female participant was eighteen.

In this session the topic was "Personal Factors to Consider in Deciding on an Occupation." The main aims in this session were to have students identify various personal factors to be considered in choosing an occupation, determine sources for getting information on these personal factors, and consider ways of using personal data in making occupational decisions.

In the session counselor gave cues, leading questions to elicit responses from students relevant to the aims of the session. Counselor also gave verbal reinforcement, that is showed encouragement and approval for responses of participants relating to the goals of the session.

TYPESCRIPT

This is Instructor 3, Group 4, Topic 2. January 21, 1966

Counselor: O.K. How's everybody today?

Student: Great.

Counselor: Today we have a new member, Eugene Miller. Is that right? Will you tell us something about yourself?

Gene: I went to High School in Washington, near Yakima. Graduated in 1965.

Counselor: O.K. Do you know these fellow-students?

Gene: No.

Counselor: Well, this is Jerry, Chuck, Bruce, Dave, Larry, Gene and Leona. . . . (Leader indicates this is 2nd session and gives review of first session and project aims. Now, did you figure out the topic for this session? The cue-initials of the 3 words are L A M.

Student: Love and marriage.

Counselor: The first two words are "looking at."

Student: Looking at myself.

Counselor: Right! The topic today is "Looking at Myself." Last week you spent some time getting oriented just thinking about yourselves, why you were at Blue Mountain Community College, some of your problems and hopes. Today we want to talk about personal factors involved in choosing an occupation. In deciding on the kind of work one wants to do, what are some of the personal things to take into account?

Student: Money. I mean how much money for example it will take for me to live on and be satisfied--do the things I want to do.

Counselor: O.K. One personal factor to consider is the kind of life one wants to lead--the kind of things a person wants to do in order to be satisfied. Could you give an example?

Student: Well, for example, a person might like to do a lot of hunting and fishing. Well, he should think about this and get into the kind of work that would let him take time off during hunting season and time for fishing.

Counselor: This is a good example. This shows that a person needs to consider his interests--such as interest in outdoor activities, interest in sports--when considering different kinds of jobs. Do you have any other examples of taking into account one's interests? Bruce?

Student: Well take me for example. I like music. I am interested in music, so I met some guys who work in a radio station last summer, and 'cause I like music I got to hanging around the station with them and then I got a chance to work as guest disc jockey at the station, and I took it and I was there three weeks checking records, taping and all kinds of things. So, if I hadn't been interested in music I wouldn't have been hanging around and anyway I wouldn't have taken the job.

Counselor: That's a good example of how a person's interests can be considered in making a decision about whether to take a job or not. If you hadn't been interested in music, you probably would not have decided to take the summer job. Any other examples? Gene?

Student: Well, I started out at about 15 doing the thing that I wanted to do that interested me. My father works for Standard Oil and I got to be around there a lot and I got to know that I really was interested in that kind of work. My father got me a job with the company. I've been working with them ever since and I hope to continue because I am doing what interests me. But if I didn't like cars and mechanics and that I wouldn't have wanted to work there.

Counselor: Yes, that's a good example, too. Shows that even though someone else can be helpful in getting a job for you--it still is important to take into account your own interests in deciding whether to take the job or not. Like you, Gene, taking into account your interest in mechanical things. What about you, Dave?

Student: Well, I like people. People interest me. I'd like to work somehow so to work with people. I can't think of any example, don't have any idea what I want to do . . but I guess I'll look for something to be around people.

Counselor: That's a good point . . Just knowing that your interest in people will be important to consider in looking at different jobs is important. Chuck, what about you?

Student: I can give you an example of what not to do. I had a job in a dental lab. Might of been interesting . . but I don't know. I didn't like it. I just took the job. Wanted to make some dough.

Counselor: You feel that you didn't consider your interests when you took the job?

Student: Yah. I just went to work. I made false teeth. And the dentist got the money. Of course, he has lots more education. The lab charges fifty-five or sixty dollars and the dentist charges about two hundred and fifty to the person. I worked in The Dalles, but I didn't like it.

Counselor: How do you think you could have avoided getting into a job that you didn't particularly like by taking into account your interests?

Student: I don't know. I didn't know I didn't like it till I got there.

Counselor: Bruce, any ideas about this?

Student: You could have found out first what did interest you and then you have to see if the job gives you what you want. Like me. I like music. So working as disc jockey was o.k. Or, say, like Dave, he likes to work with people--and he knows this--and so working to make false teeth wouldn't do anything for him cause there's a lot of difference between being where there's people and where there's just false teeth. (Laughter)

Counselor: Fine. Fine. That's a good example, Bruce. Shows how a person needs to find out about his interests first, and then consider if the job will be one that will let him satisfy his own interests.

And, how do you think personality characteristics influence your choice of jobs?

Bruce: Have to like the people around you.

Student: That's not true, you don't have to.

Bruce: You don't have to be buddy buddy, but if you are going to work with people you should like to be around them.

Counselor: What do you mean by that, Bruce?

Bruce: If I had to work side by side with someone I can't stand, I just couldn't take it.

Counselor: Some jobs require working with hands, some with ideas, some with things, some with people . . . Would this be a factor to consider in making a choice?

Bruce: Sure, if you're not able to work with people you're in trouble.

Counselor: You feel getting along with others is important. Gene, what do you think?

Gene: The ability to get along with people would mean a lot in a job when you are meeting the public.

Counselor: All right, then you need to consider whether you like working with people, in choosing a job. What else?

Student: I think you have to think about security. I mean a lot of people just have to have security. Others . . well they just don't feel that way. They don't care if they are out of work for a while. Guess some guys seem to like to get that unemployment every so often. Now others, they just want a check every month. Some jobs don't go year round.

Counselor: Yes, that's a good point. A person needs to think about how important having security is to him, and then think about the kinds of jobs where he would get the degree of security he wants. Good point. What else? What other personal factors can you think of?

Student: Well I think you got to think of how important is it to have advancement. I mean some guys don't care if they ever amount to anything. I mean they don't care if they get a better job or I guess even if they get more money. But other guys--well, they are gungho for moving up. They want to get a better job all the time. So you've got to think about this. If you want to advance--then you've got to get in a job where you can advance.

Counselor: Yes, taking into account one's need for advancement is important. What about intelligence, or lack of it? Does this have anything to do with choosing a job?

Student: That depends upon the field.

Counselor: It does depend upon the field. Good point. Does education play a major role in choosing a job Dave?

Dave: One must have capabilities for any job, depending upon the company you must learn to do a job in a particular way. But you have to have the capabilities.

Counselor: Yes, what about intelligence, Dave, mental ability?

Student: Intelligence, you have to have some mental ability to succeed.

Counselor: O.K. You have to have some degree of intelligence to get started.

Student: One of my friends told us about a guy who dropped out of school at 18 and eventually became head of a large company.

Student: Well, that is unusual and not the rule.

Bruce: Of course, but it can happen. The point is that it takes more than intelligence and education to guarantee success.

Counselor: What part does intelligence play in deciding on the kind of work one wants to do? Do some jobs require more intelligence than others?

Student: They all need ability, but some require more intelligence.

Counselor: Yes, I think this is the main point here. Good idea. How about physical health?

Student: It depends upon the demands of the job, they differ.

Counselor: It depends upon the demands of the job. Can you give us an example.

Student: Take a doctor . . . makes his rounds in hospital . . . office hours . . . house calls. That's hard on him, and if he's sick a lot he loses patients.

Student: Who wants to go to a sick doctor. (Laughter)

Student:	That's just the point.
Counselor:	Good point . . . physical condition. In choosing a job you need to consider the physical demands. Any other examples.
Student:	One with a bad back shouldn't try to do heavy construction nor one with a bad leg try to do job that requires lots of walking.
Counselor:	Good examples. Can you see a person not being hired because of a certain physical handicap?
Student:	Sure . . . that would be a let down, but he would have to adopt (sic) to it. I guess lots of jobs have physical requirements before you can be hired.
Counselor:	Right! True. And, one must consider these factors in choosing. These are good points to consider--one's mental ability and physical strength and characteristics.
Student:	Yes, if he were in a job and developed an allergy or something, he would either have to adjust or change jobs.
Counselor:	Yes, these are good ideas. Good points. Leona, what are your feelings?
Leona:	I agree with what they have said.
Counselor:	Gene, can you add anything? Can you think of any other personal factors to consider? What about special aptitudes? How about those in thinking about the kind of job one wants.
Gene:	Either have them or you don't. Special interests can be developed.
Counselor:	Interests can be developed. O.K. Do some jobs require more than one aptitude.
Student:	Yes.
Counselor:	Can you give an example?

Student: Take radio . . . you have to have a good English background.

Student: I disagree . . . have you ever listened to radio?

Counselor: What about aptitudes?

Student: Newsmen on radio, like a reporter on the scene, must get along with people and must know how to talk.

Counselor: O.K. Anyone else give an example where more than one aptitude is involved. Dave?

Dave: Huntley and Brinkley for example . . . they have to have background in history . . . and be intelligent. Must have good English background and know how to read.

Counselor: Uh huh . . . good point. Gene, what special aptitudes are required in work at the service station?

Gene: At Standard service stations you need knowledge of engineering and be able to get along with people and if one is to advance very far he must have ability to sell.

Counselor: Good points. You've described quite a few special aptitudes to consider. I can see you aren't finished with this yet, but our time is up for this session, so we'll have to quit. During the week, how about seeing just how many of the points we talked about--the personal factors you mentioned and we discussed in considering different jobs--how about seeing how many of these you can relate to yourselves. For example, just what are your interests? Then, next week, when we start we'll take a few minutes to talk about these.

Now, before we break up today, how about a quick summary of this session. What were the main points today? Bruce?

Bruce: We talked about the personal things to consider in deciding what kind of work to choose. Deciding upon what one goes into. We decided you need to know about these things, and that it will require certain degrees of aptitudes, intelligence, training, liking to be with people . . .

Dave: . . . and personality traits . . . and . . .

Counselor: Good! Chuck, what is another very important factor we discussed?

Chuck: Health.

Counselor: Yes, these are all important. And we agreed they should be considered. O.K. We accomplished quite a bit in this discussion today. You brought out a number of good points. Sorry we can't continue now, but next week we are going to be talking about how we fit into the world of work, same time, same station! See you here then. In the meantime--be giving some thought to your own personal characteristics. So long.

APPENDIX E
DEVELOPMENT OF SIMULATION MATERIALS

The basic methodology employed in developing the simulation materials was threefold: (1) identifying as accurately as possible the real-life conditions and constraints involved in vocational decision-making of students enrolled in the community college; (2) creating make-believe situations resembling the real-life conditions as closely as possible; (3) testing the situations by using them with groups of community college students to teach vocational decision-making.

1. Identifying conditions and constraints. This was a tedious, time-consuming undertaking, involving the collecting of data about community college students and the community. Information was gathered to permit description of typical students, with which the enrollees could identify easily. Data included family background, mental ability, aptitudes, interests, values, and needs of the students; social and economic conditions of the community; and occupational opportunities and mobility patterns in the area. In addition to information on file for each student, counselors were asked to describe typical students enrolled in the community college.

The objective reports from school records together with the subjective descriptions given by the counselors constituted source material from which the simulation situations were created.

2. Creating the simulation situations. The first drafts of student profiles and unplanned events were developed from objective data and counselor descriptions. Two profiles, one male and one female, were prepared with unplanned events for each. Following a review of the materials by a panel of researchers, modifications which were suggested were made in the profiles and unplanned events. The revised materials were tried out on a small group of Oregon State University students to identify further modification needs, and suggested changes were made in the materials.

In August a two-day workshop was held at Oregon State University with counselors from the community college participating. The purpose of the workshop was to revise and refine the materials further; and to develop additional profiles. It was decided that more male than female profiles would be needed, since the student population at the community college had a ratio of six to one, favoring male enrollees. In the workshop the first two student profiles were revised again and unplanned event cards were added. In addition, outlines were made for three student profiles, which were to be completed by the community college counseling staff and revised following test.

3. Testing the materials. These materials were pretested first on a group of college students and needed revisions in
Prior to use in project the simulation materials were reviewed by a research panel and the community college counseling staff; and were pretested on a small group of college-age students who would not be involved in the research project. The simulation materials consisted of a student profile, which gave a narrative description of a typical student, including information about the family, the community, the student's high school record, and a test data sheet with results from ACT, GATB, EPPS, Otis, Kuder Vocational and Personal, and Cooperative Reading tests. It was assumed that each student in the school had access to the information about himself which was presented in the simulation student profile. Each narrative description ended at a decision point in the life of the profile student.

A choice network implemented through counselor cueing accompanying each profile, was designed to provide a general chaining of activities and events which might be expected in terms of most likely alternatives under the conditions defined by the profile data. The network was designed to achieve some degree of uniformity in providing each participating group with a similar set of decision-making experiences. A set of unplanned events accompanied each profile, to provide practice in recognizing and dealing with constraints. Use of the simulation materials in this research project was intended in part as a further test of the materials. Revision of materials was made following completion of this project.

APPENDIX F

TYPESCRIPT OF COUNSELING SESSION USING SIMULATION MATERIALS AND COUNSELOR REINFORCEMENT

The following typescript constitutes a transcription of one small group counseling session in which simulation materials and reinforcement counseling techniques were used. Typescript begins at conclusion of opening interval. The group was made up of seven participants, all of whom were enrolled as freshmen in a community college. Five of the group members were male and two were female. Four of the male members were eighteen and one was nineteen years of age. Both female members were eighteen. In this session, students were given a chance to simulate decision-making by a student similar to themselves in background and individual characteristics. Primary aims in this session were for students to learn to use information in identifying alternatives and to consider consequences of the different alternatives in making decisions.

TYPESCRIPT

Session 1 A SRC (Uria)

Counselor: Now that we have become acquainted with one another, let's begin our task for today. Remember in our meeting on Monday we talked about the small group sessions we would have each week, where we would plan the lives of fellows and girls much like the students here at Blue Mountain. Remember we agreed that the main purpose of these sessions would be to help you become better able to make your own decisions about your work career and educational plans. Your goal, then, is to become better equipped to make educational and work plans for yourselves. During the rest of this quarter in our small sessions we will make educational and occupational plans for four students--with backgrounds much like yours. For each person we will have information about his background. As you plan his or her life you can ask me for additional information, or you may wish to seek information elsewhere. For each person I'll tell you about a few unplanned events--things that happen that the person hasn't counted on and which may call for changing plans.

All right, now, I want you to meet Uria. Uria is a fellow much like yourselves. Here is a data sheet about his family, his school record in high school, his interests, abilities and aptitudes. You can see that Uria lives just out of Pendleton with his mother and step father and half sister on a small farm. They don't have too much money, but they have been able to make a living--from the farm. . Uria's mother and step father both dropped out of school. Uria's grandparents lived on the reservation (Indian). Uria's half sister is in first grade. Here are the scores from the tests Uria took last spring in high school. You can see that his highest interest scores on the Kuder were in scientific and persuasive. . He also had above average aptitude in spatial and motor on the General Aptitude Test that the Employment Office gave last May. He does not seem to like things to change . . . seems to enjoy security; likes things to remain stable . . . likes to feel secure. He seems to like being with people. Here is his high school record. You can see he was outstanding in athletics--had A in physical education all through high school. His other grades are C's and D's.

Here is the personal inventory sheet he completed last spring. He states that his occupational goal is "college." He also said that his hobbies are bulldogging, horses, and sports.

Now you will want to use this information in making plans and decisions for Uria. You are to put yourselves in Uria's place and together you are to make decisions and plans concerning his education and work for the four or five years right after his graduation from high school. Uria will need to decide what school he will attend after high school, if any; what he will take in school, if he goes; what additional information he will look for; what activities he will try out before deciding on a full-time job--which will be the beginning of his work career.

In making these decisions for Uria you will want to think about different possibilities and the consequences of taking different actions. Your goals today are to learn to use information in identifying alternatives; and to consider consequences before making decisions.

All right, now you have Uria's background. Remember, he is just finishing up the summer's work on the farm.

He finished high school last June. His first decision is what is he going to do this fall. Will he go on to school? What do you think?

Rick: I think he should go to work on the farm. I mean that's it. He . . .

Counselor: What information do you think he will want to consider to help him decide about going to school this fall, Elaine?

Elaine: He seems to like mathematics. He should look at that. He has B in high school math.

Counselor: Yes, his high school record is important to consider in thinking about whether to go on to school or not. What else?

Randy: Well on this he scored high in clerical. And on this he was high in clerical too.

Counselor: Good points to notice. What might this information mean to Uria in thinking about whether to go on to school or not?

Elaine: He probably would enjoy working in some kind of clerking. He didn't like change. Clerking is just a lot of the same thing. Maybe he would like to be a clerk.

Counselor: These are good observations and very important considerations. Does it seem then that clerical work might be one possibility for Uria? Are there other points he should consider? How does this relate to his problem about deciding whether or not to go to school this fall?

Steve: Well, he is just average in intelligence. Look at his high school grades and his IQ. I don't care what he wants to do. He's got to think about how smart he is.

Counselor: Yes. These are good points to think about. How will these factors--his mental ability, his school records, his achievement in school so far--affect his decisions? What about his thinking of clerical work as a possible job choice? How would this affect his going on to school?

Steve: I don't know that it will keep him from doing clerking. That doesn't take too high an IQ. That speaker yesterday said that much. He should stay away from college though--from any kind of that cause he's just not that good. Even though he says he likes school ok, he's no hot shot student and probably he'd flunk out at U of O. I know a guy like him and he did flunk out. Now he's a mess.

Rick: Ya,but he said he wanted to go to college. Look the only thing he wrote for choice was college. He still wants to go to college, and . .

Clara: Yes, this is what he wrote, but he wasn't thinking about all that might happen . . He probably wrote that last year when we filled out all that stuff. Remember?

Counselor: Yes. This information is from the forms completed while he was in high school last year. Now, the question is what does he decide, now that it is getting to the end of the summer, taking into account the information he has about himself and what he knows about different kinds of work. Will he want to go on to school this fall? Art?

Art: Well, he has worked out on the farm a lot; and he knows about that, but he likes people, and he's high on social service . . .

Rick: Why doesn't he just stay on the farm. He should stay on the farm. That's just it.

Counselor: The facts that he enjoys working with people and is high on social service are important points to consider. Are there other things--other information to take into account?

Art: Well he likes sports--football, bulldogging, horses.

Rick: He should think about farming.

Counselor: So, does it seem that thinking about farming--something related to farming--might be a possibility to consider, along with other possibilities?

Art: Ya.

Counselor: Of course, he might come up with other possibilities later, don't you think; even though right now he might want to make his decision about whether or not to go to school this fall, taking these two possibilities, clerical and farming, into consideration. What do you think?

Steve: Well, he could decide whether to go to school or not. He hasn't got all day. If it's already the end of summer.

Counselor: This is an important point. He really does need to make some kind of decision right away about school, doesn't he? What do you think?

Randy: One thing, farming is something he knows. He's had work on the farm and he knows it.

Counselor: Good point to consider--his experience on the farm, so he has information about the kinds of work involved and can use this information as he considers alternatives.

Rick: It's a normal thing to do to go on with the farm. I know a lot of guys around here who just naturally take over when their dad gets old. They just stay. Don't even go to school.

Counselor: What other information might he consider in thinking of farming. Are there different kinds of agriculture--related jobs that he might want to investigate? Clara?

Clara: His outdoor score was not high.

Counselor: This is something to be considered, isn't . . .

Al: Yes, but he likes sports though, and baseball and football. He likes horses and buldogging and that sure as hell is outdoors. I don't think you can go altogether on what these tests say. Sometimes they are all off.

Counselor: Good point. You think it takes more than just looking at test scores to make decisions? Are you suggesting that Uria might want to look at all the test information and also think about other things he knows about himself--things he enjoys doing; things he does well; the kinds of situations he enjoys? In looking at all these things, what does it seem Uria might want to do this fall?

Al: Well, he likes sports and baseball. He likes horses and bulldogging. He might like the farm o.k.

Counselor: Are you suggesting that one possibility for Uria would be agriculture-related work?

Al: Ya, that's one thing for sure.

Counselor: Would you say then, that at this point Uria might want to consider agriculture-related jobs and clerical work as two possibilities?

All: Ya. Yes.

Counselor: What do you think would be the consequences for Uria if he should go into either of these kinds of work?

Al: I agree with what Art said. Farming is something he knows more about. He likes working the horses and bulldogging. He's not sure about clerking--what it really means. He might not like it. And with farming he's got a good idea and with clerking it's anybody's guess.

Counselor: These seem important considerations. What do you think he might want to decide now. Remember, it is almost time for fall term, so if he is going to go on to school he will need to make some immediate decisions. What do you think?

Steve: Looks like the thing to decide now is to do something with farming. He can find out more about these other jobs too. He might want to work at something for a company or the government, and then when his dad gets old he'd take over.

All: Ya. Yes.

Art: But I say he wants to go to college and two years of college won't hurt him. He can get a better idea of what he wants to do.

Counselor: Steve, what information will Uria need to consider in thinking about whether to go on for more schooling this fall?

Steve: Well, he's got to figure out if he needs to go to school, to college, to get into the kind of work he wants. He could . . .

Counselor: All right. Good point. Then, if he has tentatively decided on clerical work--some kind of job in this field--or farming--some kind of agriculture-related work--the question is does he need to go to school this fall?

Randy: If he goes to school for two years before he starts full time work, may be he can even learn enough to do something with it, the farm, make more out of it. His old man never made money. Maybe he can make something there.

All: Sure. Yes.

Counselor: Taking these factors into consideration, do you say that Uria will want to enroll in school for this fall--go to school for two years?

All: Yes. Ya.

Counselor: Then, where will he go to school? Which school will he go to?

Steve: We already talked about that. He can't make it at U of O. He'll flunk out. Be a mess. We decided he would go to a community college. Like here. He doesn't need a degree to be a farmer or a clerk and like I said you can find out a lot more about other jobs here too.

All: Yah. He goes here.

Counselor: That's fine. It looks as if Uria has considered consequences of taking a four-year college as opposed to community college, and in terms of his background in school and his decision to look into the general occupational areas including agriculture-related and clerical--he has decided to go to community college. Fine. Now, I have some information about Uria that you will want to take into account. Just before the term begins, an unexpected event happened. Uria's father is in an accident and has to go to the hospital. He will be there for several weeks. How will this influence Uria's decision about going to school this fall?

Al: Maybe he could stay out of school fall term. This would give him time to work on the farm. This way he could get the feel of running it. See if he likes it.

Counselor: Sounds like a possibility. What about this?

Rick: Probably with the added responsibility of taking over the running of the thing like his father did, he probably would . . . , well it'd be different from just working like he is now. He could see if he likes it.

Counselor: You think having responsibility of running the farm would give him more of a chance to see if he likes it?

Al: Hey. This would be a good deal. He could use his math too. He'll have a lot of figuring to do. My old man always is.

Counselor: So one consequence of his planning to stay out of college and to take over at the ranch this fall would be that it would give him a chance to see how he likes the managing part of farming. Right? And it would give him a chance to see how he could use his math background, too? Any other consequences?

Art: Ya, I think this is going to louse things up. If he stays out of school fall term, it would be easier to stay out another term and another and maybe never go to school.

Counselor: You mean one consequence of staying out would be he might never get started to school? Clara?

Clara: Well, it might come to be a habit and he'd never get started.

Counselor: Very possible. So this is one possible consequence of his staying out of school this fall and just taking over on the farm while his father is sick. What else might he do?

Al: There's something else about his staying out, the draft will get him. I think he should go to school.

All: Ya.

Steve: He can go to school and fix his schedule to get home early. That way he can still get some hours work in on the farm. He'll have to plan his schedule.

Counselor: So this is another possibility--going to school but getting a schedule to get home early. What would be the consequences of this action?

Randy: Well, it would be o.k. He could get in the courses and still keep the farm going.

Counselor: All right. Then, does it seem that after thinking of the consequences of staying out of school as compared to going to school this fall, that Uria will decide on going with a light schedule? Is this right, Rick?

Rick: Yes, but he has to schedule his courses so he can get home early to work on the farm. .

Art: He is going here instead of U of O and that will make it easier for . . .

Steve: Ya. This is what he does.

Counselor: All right. Now, then, what about the courses?

Rick: He can ask the counselor to do the schedule . .

Counselor: Elaine, what do you think? What does he need to consider in deciding on his schedule for the fall?

Elaine: He can be taking things that have to do with farming. If he's going to be a better farmer than his father . . And, he can find out more about other jobs, too.

Counselor: All right. Good. Now what do you think he might want to take? Here is the schedule of courses for the fall, and the catalog of all the courses here. Maybe these will have some information to help Uria decide.

(They study bulletins.)

Randy: Look at this. This technical agriculture thing. I'd take this. Says for training for business, mechanical, producing parts of business. That's . . .

Steve: Yah. That's a good idea. He gets math . . . like that and animal science. He'll like that. He likes horses and all. I don't know how he'll go for this plant science. That could be a dud. Will he like engines (combustion)? Was there something on . . . Yah, but he isn't going to like this . . communication?

Clara: Yes, but he doesn't have to take that, not till later.

Al: Besides he has to get home early remember, and English . . . What about this? Industry practices? What's that about?

Steve: Maybe he can get ideas of other jobs like business parts of farming. But let's leave this out now. He can take these others, math Monday, Wednesday, Friday, 9; plant science Tuesday, Thursday 9 to 10:30; animal science Monday, Wednesday, Friday at 11. When is the engines one?

Clara: It's on Monday, Wednesday and Friday at 1:00. He can't take that.

Rick: Yes he can. He can leave at 2 and be home by 3 at the latest and that gives him time. Besides if he doesn't take it now he'll be loused up for next time. I know, that happened to me in high school.

Counselor: Good point, Rick. Good points that you have considered in looking at alternatives for Uria's schedule . . It's especially good to look at the prerequisites as you did. As you pointed out, Rick, if Uria doesn't get the course in combustion engines this fall, he won't be able to take the second part of the course which is offered only in the winter. Now then how many hours does Uria sign up for?

Clara: He has 12 hours, I think . .

Rick: Yah, 12 hours.

Steve: Yeh, that's it. That's all he can take and run the farm.

Counselor: All right, now. I have some information about Uria for you to consider. The fall quarter gets underway. Uria takes the courses related to agricultural technology and keeps the farm going while his father is sick. In November his father is ready to take over again. What will this mean to Uria? What about winter term?

Randy: Well, that will depend on his grades. What grades did he get?

Counselor: Good point to consider. According to information on Uria, his grades for fall term are all C's.

Steve: Well. He only had twelve hours and nothing that he couldn't understand.

Art: Yes. That's right.

Randy: Then why not just go ahead and take the next terms courses like they are here in the book. He could take the full course this time cause he won't be working.

Counselor: That sounds like a possibility. What do you think? Steve, you mentioned that Uria might get information about other jobs. What about this?

Steve: Well, he could find out about different kinds of jobs . . . like something that might let him be with people . . . .

Art: Say, what about this police course? Look at this. He likes people and he's big enough, and this might be a possibility, and . . .

All: Ya. Yah.

Counselor: Yes, this sounds like a good idea. Now, do you have any idea where he might get that kind of information--in addition to what he will learn from his classes and the catalog that you have here?

Steve: Well, I know Mr. Heyer said there were books in his office that had information about different kinds of jobs, and we could use them anytime, and I think there is a book in the library on this.

Counselor: These sound like good sources for getting added information about occupations. Do you think it might also be a good idea to talk to . . .

Steve: Yah, my high school teacher. He'd know a lot about this.

Counselor: Good. I hate to break in here, but I see our time is up for today. It looks as if Uria is off to a good start, despite a couple of problems that came up for him. The next time you can plan Uria's life for the next couple of years. Before we stop today, how about summarizing what happened in our session today? Rick?

Rick: Well, the main things that happened. We decided to start out with farming. We thought about being a clerk, but it didn't seem too good for him. Farming was more like what he knew, let him be out-of-doors, and he could find out about different kinds of jobs that have to do with farming, and business and clerical and police work . . . those others that were in the catalog, and he can look into these . . I got the idea myself of having to think about all that might happen to a guy in deciding on something. I never thought about coming here before or you know not coming. I just came but I didn't really know what I was here for, I guess. I never thought about all this.

Counselor: Good observation, Rick. I agree, it is important to think of consequences of different actions in making plans for work and schooling. Anything else to add? Elaine?

Elaine: Well, he decided against a university. He didn't need it . . . He

Art: . . He . . .

Steve: He didn't need university . . . being a farmer or a policeman . . . he didn't need it. So that's why he went here. I got the idea that you know you got to think about all this stuff, like how smart you are and what you're going to do and that stuff, and not just say "college" like he did on that test.

Randy: Yes, and I got an idea on taking courses. Like he decided at first on the ag tech course. It was closest to farming, and he could get more ideas on other jobs that he might want to do. That's a lot like me. I'm going to look up that stuff in the books we talked about, for me.

Counselor: Very good. Al, anything to add?

Al: Well, he thought about it, and he looked at the college catalog. He thought about it because he wanted to take something to do with farming, I guess, and didn't know what to take, but . . .

Steve: That's right. He talked about it and decided on taking something that had to do with farming at first, and looking at the college catalog that gave me an idea about using the catalogs.

Counselor: Good. Anything else?

Rick: You got to think what happens if you do things like if he stayed out completely he never would go back.

Counselor: That's fine. A good point to mention. You've done a good job of summarizing our session today, and you've done a fine job of pointing up the importance of using information to decide on alternatives. You've pointed to the need to think of consequences before taking steps, too. Very good. Next time we will complete Uria's plans to the time he goes into work full time. In the meantime, you might want to be looking up some of the information you mentioned he will be needing to make up his mind about his future educational plans and work decisions.

And, how about during the coming week, looking up information on law enforcement for Uria, and seeing if you can do some of the same things for yourselves that you have done for Uria today--look at your own interests and aptitudes and see what kinds of work might be

possibilities for you to consider . . . look in the references in the occupational library to see what kinds of jobs are listed that might be possibilities for you . . . talk to people about different kinds of jobs . . . O.K.? Bye, now. See you next week.

APPENDIX G

DECISION PROJECT
BLUE MOUNTAIN COMMUNITY COLLEGE–PENDLETON, OREGON

E-1: COUNSELING TECHNIQUE: DECISION-MAKING PROJECT

Typical Student Task Problem: SELF EVALUATION TASK

1. During the task students are to make decisions concerning their future.

   During the first session the counselor indicates to the group that each group member will be making decisions to plan his own life for the next four years. He will get to know his likes and dislikes, his background, his abilities. He will consider alternatives which occur each time a decision is made.

   During sessions students organize information, consider alternatives, and/or make vocational decisions.

2. During each meeting students will spend two to five minutes reading the special booklet section on vocational decision-making. Counselor will use different booklet-task for each session.

3. (30 minutes) Following the reading of the prepared materials, students will discuss the information they have read. Counselor uses cues. "Any more ideas?" or "What do you think about this?"

4. (15 minutes) After the reading-discussion period, students will spend the last part of the session completing the task-section of the pamphlet for the session.

5. Counselor closes session. See E-1a. During session, counselor shows warmth, understanding, and empathy and tries to create atmosphere free from threat.

APPENDIX H

VOCATIONAL GUIDANCE ESSAYS AND TASK SHEETS FOR SELF-EVALUATION COUNSELING GROUPS (REVISED FOLLOWING PROJECT COMPLETION)

DECISION PROJECT
BLUE MOUNTAIN COMMUNITY COLLEGE–PENDLETON, OREGON

E-2a: DECISION MAKING

WHY BLUE-MOUNTAIN?

Students go to a community college for various reasons, how about you? Some students plan to take special curriculum. Some students are interested in taking a technical program, to be prepared to go to work after completing the program. What about you? Why did you enroll in a community college?

What are advantages of attending a community college? There are many occupations for which you can be prepared in a community college--drafting, mechanical repair work, construction workers, auto body repair, stenography, beauty operators, hospital attendants, sales clerks. The two-year college offers a chance to stay at home and go to school. There is opportunity to know the teachers and to get more individual help. The cost of attending a community college is not great. These are some of the main advantages of two-year colleges.

TASK SHEET E-2a

WHY BLUE MOUNTAIN?

TASK: **Why did you decide to come to Blue Mountain Community College?**

E-2b: DECISION MAKING

UNDERSTANDING YOURSELF

What about yourself? Do you know your attitudes, capacities, and interests? What do you really know about yourself? Where can you find out about yourself?

You can get information about yourself as you go through life. You will find for instance, that you like doing one thing, and dislike another; or that you seem to have a knack for doing one thing and apparently are unable to do something else skillfully.

You can also find out your likes and dislikes, your abilities and lack of abilities through special tests which are available at most counseling offices, employment offices, and schools. You can take interest inventories to find out how your interests compare with those of people doing different kinds of work. You can take aptitude tests to find out your capacities for working with ideas, numbers, words. You can find out about your mechanical and clerical aptitudes. The more you know about your interests and your aptitudes the more opportunity you have for deciding on an occupation that you will find enjoyable and in which you will have a good chance of being successful. You can compare your interests with those of people working in different kinds of occupations. You can compare your aptitudes with the special skills and knowledges that different jobs require.

By getting to know yourself as well as possible and using information about yourself when you make an occupational choice, you can increase your chances of success and happiness.

DECISION PROJECT
BLUE MOUNTAIN COMMUNITY COLLEGE–PENDLETON, OREGON

TASK SHEET E-2b

UNDERSTANDING YOURSELF

TASK: What are your interests? For each of the following check under the column to describe yourself--whether you like the activity very much, not at all, or have no particular liking or disliking for it:

	Dislike	Neutral	Like
Being outdoors			
Working with numbers			
Listening to music			
Playing music			
Painting, crafts			
Working on cars			
Watching sports			
Playing sports			
Being alone			
Being with people			

What are your aptitudes. For each of the following rate yourself, to describe your abilities.

	Below Average	Average	Below Average
Reading			
Mathematics			
Clerical work			
Mechanical tasks			
General learning ability			

E-2c: DECISION MAKING

OCCUPATIONAL INFORMATION

In addition to knowing about oneself it is important to know about the world of work in order to decide on a life work that will be most likely to give happiness and success. A person needs to know what opportunities there are for employment, where the jobs are located, the requirements for getting a job, special training or education required for different jobs. A person needs to know what rewards jobs will give, as well as knowing about the chances of getting different kinds of jobs. Before deciding on a career, a person needs to know what are the chances for advancement and the wage scale? It is important to think about the possibilities of being transferred and the chances of the job changing or being eliminated.

A person needs to think about occupational areas as well as specific jobs. There are many jobs that require similar skills and knowledge. A person should know about occupational areas, and should consider for different areas whether the work is concerned mainly with people, things, or ideas.

DECISION PROJECT
BLUE MOUNTAIN COMMUNITY COLLEGE–PENDLETON, OREGON

TASK SHEET E-2c

OCCUPATIONAL INFORMATION

TASK: Select an occupation that is of interest to you at this time. Fill in as much as you can about the occupation.

What is the name of the occupation in which you are interested? ____________________

What is the chance of getting a job? ____________________

What are the requirements for this job?

Education? ____________________
Training? ____________________
Union regulations? ____________________
Age? ____________________
Health? ____________________
Skills? ____________________
Knowledge? ____________________
Other ____________________

What is the starting pay for the job? ____________________

Is the work year-round or seasonal? ____________________

What are the chances for advancement? ____________________

Where would you go to apply for work? ____________________

What other jobs are related to the one you selected--requiring similar skills and background? ____________________

DECISION PROJECT
BLUE MOUNTAIN COMMUNITY COLLEGE-PENDLETON, OREGON

E-2d: DECISION MAKING

SOURCES OF INFORMATION

Where can you find out more about yourself? There are four sources of personal information that you could use. (1) The testing program offered by the college can provide a great deal of information about yourself. You can find out how your interests compare with others by studying the results of the Kuder Vocational and Personal Inventories. You can tell about your aptitudes by going over results from the General Aptitude Test Battery. You can get an idea of your scholastic aptitude and general mental ability by studying the results from the Otis Quick Scoring Mental Ability Test and the Scholastic Aptitude Test. (2) You can study your school records. By looking at the record of your scholastic achievement during high school you can get an idea of the subjects in which you showed a particular aptitude. You can tell, too, the areas in which you were weak. (3) You can make a self evaluation by thinking about yourself--deciding what are your strengths, your weaknesses, your likes and dislikes. (4) You can get professional evaluations--from others. You can find out what others think of you. By putting information from all of these sources together you can get a general idea of the kind of person you are. You cannot rely entirely on information from any one source--but you can put information from all sources together.

DECISION PROJECT

BLUE MOUNTAIN COMMUNITY COLLEGE–PENDLETON, OREGON

TASK SHEET E-2d

SOURCES OF INFORMATION: PERSONAL DATA

TASK: Where have you looked for information about yourself? You have some idea of "who you are." Where did you get the information which you used to picture yourself? Check below under the correct column to describe your source of information about your interests, aptitudes.

In this column indicate where you found out about each interest or ability.

Check Source of Information

In this column list your main interests and abilities.	Test Data	School Records	Self Evaluation	Ideas of Others
Interests				
Abilities				

If you check "ideas of others" indicate whose opinions you have used.

E-2e: DECISION MAKING

SOURCES OF INFORMATION: OCCUPATIONAL INFORMATION

Where can you find out about the world of work? If you want to find out about different jobs, different occupational areas, where can you seek this information? There are four main sources of occupational information. (1) You can go to the library and find references on the work that interests you. The Dictionary of Occupational Titles contains information about different occupations. There are many other reference books describing occupations. (2) Most schools keep occupational files as part of the guidance services. Sets of pamphlets, occupational guides, and career kits are available in the counseling offices. (3) The local community provides a lot of information about the world of work in the community. It is possible to gather considerable information about different jobs by watching people who are working in the job, asking them about it, visiting the offices and companies where the work is done. (4) The Employment Office has a great deal of information about the employment situation in the area, as well as information about different occupations.

TASK SHEET E-2e

SOURCES OF INFORMATION: OCCUPATIONAL INFORMATION

TASK: Where have you looked for information about occupations? You have some idea of different occupations that you might like to try. Where have you gone to find out about these occupations? Check under the column below to describe your sources of information about the occupations you have named.

In this column name two occupations that you have thought about as possible life-work	In this column indicate where you have looked to find out about these occupations. Check sources of information for each occupation.			
	Library References	Guidance Files	Place of Work	Employment Office
1. __________	__________	________	________	__________
2. __________	__________	________	________	__________

E2f DECISION MAKING

Deliberating About Alternative Occupations

TASK: This is a deliberation task. You will have the chance to compare alternatives--to consider two possible occupational choices and decide which would be more rewarding to you. After you have filled in both columns, for both jobs, count the number of times you checked "yes" in both columns for the same item for Job 1. Then count for Job 2. Is there a difference?

In this column name two occupations that you might consider as life-work, and under each occupation describe the occupation by checking "yes" or "no" for each characteristic listed.

In this column describe yourself by checking "yes" or "no" under each characteristic listed to indicate whether or not it is one of your strong characteristics.

1. ________________	Yes	No		Yes	No
a. work with people	☐	☐	a. like to work with people	☐	☐
b. work with things	☐	☐	b. like to work with things	☐	☐
c. work with ideas	☐	☐	c. like to work with ideas	☐	☐
d. work indoors	☐	☐	d. like to work indoors	☐	☐
e. work outdoors	☐	☐	e. like to work outdoors	☐	☐
f. mechanical work	☐	☐	f. ability to do mechanical work	☐	☐
g. clerical work	☐	☐	g. ability to do clerical work	☐	☐
h. routine work	☐	☐	h. like routine work	☐	☐
i. changing work	☐	☐	i. like changing work	☐	☐
j. requires verbal skill	☐	☐	j. above average verbal skill	☐	☐
k. requires math skill	☐	☐	k. above average math skill	☐	☐
l. wages above average	☐	☐	l. want above-average wages	☐	☐
m. are job openings in area	☐	☐	m. want to stay in area	☐	☐
n. had chance for advancement	☐	☐	n. want to advance	☐	☐

2. ________________	Yes	No		Yes	No
a. work with people	☐	☐	a. like to work with people	☐	☐
b. work with things	☐	☐	b. like to work with things	☐	☐
c. work with ideas	☐	☐	c. like to work with ideas	☐	☐
d. work indoors	☐	☐	d. like to work indoors	☐	☐
e. work outdoors	☐	☐	e. like to work outdoors	☐	☐
f. mechanical work	☐	☐	f. ability to do mechanical work	☐	☐
g. clerical work	☐	☐	g. ability to do clerical work	☐	☐
h. routine work	☐	☐	h. like routine work	☐	☐
i. changing work	☐	☐	i. like changing work	☐	☐
j. requires verbal skill	☐	☐	j. above average verbal skill	☐	☐
k. requires math skill	☐	☐	k. above average math skill	☐	☐
l. wages above average	☐	☐	l. want above-average wages	☐	☐
m. are job openings in area	☐	☐	m. want to stay in area	☐	☐
n. had chance for advancement	☐	☐	n. want to advance	☐	☐

E-2f: DECISION MAKING

THINKING ABOUT ALTERNATIVE OCCUPATIONS

In choosing an occupational area for life work, a person should think about the consequences of different occupations. Having gathered information about himself--knowing ones interests and aptitudes--and having gathered information about different occupations--the requirements and nature of work, a person can put the information about himself together with the information about occupations, and in so doing increase his chances of success and happiness.

A person should have a clear idea of the kinds of situations he finds satisfying and the kinds of activities he enjoys. He will know if he likes working with people, things, or ideas. He will know if he enjoys being a leader or working under direction of someone else. He will know if he likes working outdoors or inside; doing routine tasks or complex changing work. He will know if he likes being with groups, or prefers to work alone. He will know about his special talents, skills and knowledge.

A person also will know about various occupations--opportunities, requirements, rewards, working situations. By considering different possibilities for occupational choices in terms of his own characteristics, a person can increase his chances for personal satisfaction and success.

E-2g: DECISION MAKING

CONSIDERING TRAINING PROGRAMS

After deciding tentatively on one or two occupational areas as likely choices for the kind of work a person wants to do, some thought must be given to the kind of education or training required to prepare for the different occupations. Sometimes it happens that consideration of the training requirements for two or three different occupational areas results in eliminating one of the possibilities because of cost, unavailability of training programs, or other similar reasons.

When studying education and training requirements a person should take into consideration the entrance requirements, the cost of the program, and the availability of the training or education. He also should consider his characteristics again, to see if he has any particular personal characteristics which would make the training or education particularly difficult or easy for him. In thinking of entrance requirements, a person should take into consideration any learning problems that he might have such as reading problems. He also should see if he has the kind of academic background required to enter the program, and if he can meet special restrictions and certificate requirements such as high school graduation.

E-2g: DECISION MAKING

CONSIDERING TRAINING PROGRAM

TASK: This is a task in considering education or training for one of the occupations you have been thinking about as a possible career choice. In the space provided you are to name an occupation you are thinking about. Then you are to check the correct item for each characteristic to describe the kind of education or training that would be required to prepare for the occupation.

My occupational choice______________________________

The education or training for my occupational choice would have the following characteristics:

1. Training time
   _____ 2 years
   _____ 4 years
   _____ other (describe)

2. Cost
   _____ less than $500/year
   _____ $500-$1000/year
   _____ more than $1000/year

3. Entrance requirements
   _____ none
   _____ high school diploma
   _____ GPA of 2.0 minimum
   _____ GPA or higher than 2.0

4. Availability
   _____ School located in this community
   _____ School located within commuting distance
   _____ School located within 500 miles
   _____ Nearest school over 500 miles away

E-2h: DECISION MAKING

DECIDING ON AN IMMEDIATE VOCATIONAL GOAL

Deciding on the occupation one wants to choose for a first full-time job requires getting information on different occupations and oneself, studying the information and thinking about consequences of making different choices, and finally choosing one occupation from among the possible ones.

After a person gets information about occupations and employment opportunities from the library, guidance office files, Employment Office, or various places in the community, he must think about the consequences which would follow from choosing each occupation. In thinking of the consequences, a person must think about himself--his needs, his interests, his abilities. His choice of an occupation should be one that would give him the greatest amount of personal satisfaction, offer the best chance of success, and have a good chance of leading to eventual achievement of long term goals.

E-2h: DECISION MAKING

DECIDING ON AN IMMEDIATE VOCATIONAL GOAL

TASK: Your task is to select a job that you feel you would like to have as a starting point in your work career. For the job you have selected fill in below:

1. Your choice of occupation ________________________

2. How much information have you gathered about this occupation?

   ______ None
   ______ Very little
   ______ Quite a bit
   ______ A great deal

3. Where did you get your information about the occupation

   ______ Library
   ______ Guidance files
   ______ Employment Service
   ______ Working part-time
   ______ Talking to people who work at this job
   ______ Talking to parents, friends, teachers
   ______ Other (explain)

4. Have you thought much about this occupation by comparing it to other possible choices for your occupation?

   ______ Not at all
   ______ A little bit
   ______ Quite a bit
   ______ A very great deal

5. Have you considered how the occupation you selected will help you reach the kind of personal and work life you would like to have five years from now?

   ______ Yes
   ______ No

E-2i: DECISION MAKING

DECIDING ON EDUCATION OR TRAINING

After making a choice of an occupational goal, a person must decide where to go to get the education or training required for starting in the occupation.

Deciding on an education or training program takes the same kind of thinking and activity that deciding on an occupation does. A person must gather information about various programs, and must consider the probable consequences of selecting different programs. The final choice of training program is made by taking one that seems to offer the best chance of meeting the needs of the person, and seems to be best suited for preparing him to meet requirements of his chosen occupation.

E-2i: DECISION MAKING

DECIDING ON EDUCATION OR TRAINING

TASK: Your task is to decide on a school or training program to prepare you for the occupation you have selected as your preferred first full-time job.

1. Your chosen occupation ______________________________

2. Name of school or training program where you would like to prepare for your chosen occupation. ______________
____

3. How much information have you gathered about this school or training program?
   - _____ None
   - _____ Very little
   - _____ Quite a bit
   - _____ A great deal

4. Where did you get your information about the school or training program?
   - _____ Library
   - _____ Catalog
   - _____ Visiting the place
   - _____ Talking to someone who went there (other than teacher-parent)
   - _____ Talking or writing to people there
   - _____ School counselor or teacher
   - _____ Parents, friends
   - _____ Other, explain

5. How much did you think of this program in comparison to others?
   - _____ Not at all
   - _____ A little
   - _____ Quite a bit
   - _____ A very great deal

E-2j: DECISION MAKING

SETTING LONG TERM GOALS

The choice of a specific occupation is one factor in the lifetime process of vocational decision-making. In this country a person is more or less free to choose the kind of occupation that will let him reach success and happiness. However, in order to use this freedom of choice, a person has to understand the opportunities he has, as well as limitations to these opportunities. A person needs to realize that he can be restricted by his personal shortcomings as well as by situations in the world of work. A person has a choice of either drifting aimlessly toward an occupational life--learning about his strengths and limitations through trial-and-error and hoping that all will turn out for the best or mapping out a course of action that will let him use opportunities that are available and take best advantage of his talents and strengths.

A lot of anxiety can be avoided by looking on vocational choice-making as a kind of long-term process in which one can achieve work satisfactions and life satisfactions as long as one plans his work and makes occupational decisions which let him have outlets for his abilities, interests, personality traits, and values.

The choice of an occupational goal should be made according to what a person can find out about himself and the occupational areas in which he is interested. Vocational plans should be made in as broad occupational fields as possible to provide for flexibility later on.

Many of the problems of occupational choice can be avoided by setting long-term goals--the future a person hopes to achieve and then deciding on immediate short-term goals which are stepping-stones toward achieving the long-term future.

E-2j: DECISION MAKING

SETTING LONG TERM GOALS

TASK: This is a task in setting long term goals. You are to think about the kind of person you want to be ten years from now. You can see yourself ten years hence by completing the following personal data sheet.

Ten years from now I would like to be in the following situation:

1. Family situation
   ____ Married
   ____ Single
2. Number of children____
3. Place of residence____________________
4. Occupation____________________
5. Amount of income per year____________________
6. Fill in three short-term occupational goals that you should accomplish so you can be where you want to be 10 years from now.
   1. ____________________
   2. ____________________
   3. ____________________

APPENDIX I

EDUCATIONAL AND VOCATIONAL INVENTORY

DECISION PROJECT
BLUE MOUNTAIN COMMUNITY COLLEGE–PENDLETON, OREGON

DIRECTIONS: The purpose of this inventory is to find out information about students enrolled in this institution which will be useful in determining instructional programs and counseling services that students want and need. Answer every question honestly. The answers you give will help the school set up the kinds of instruction and provide the counseling services that will meet your particular needs and help you solve your problems.

Read each item carefully. Be sure to answer every question. Write the number corresponding to your answer on the line to the left of each question. If any question asks for information which you do not have, write 0 on the line. Example: In question 1, if you are 19 years old, you will write 4 on the line in front of question 1.

PART I: IDENTIFICATION

_____ 1. My age to my nearest birthday is
(1) less than 17
(2) 17
(3) 18
(4) 19
(5) 20
(6) 21
(7) over 21

_____ 2. My sex is
(1) male
(2) female

_____ 3. My academic status is
(1) college freshman
(2) college sophomore
(3) college junior
(4) college senior
(5) other

_____ 4. My marital status is
(1) single
(2) divorced
(3) married
(4) widowed

PART II. EDUCATIONAL INFORMATION

_____ 5. The curriculum in which I am enrolled is
- (1) college transfer
- (2) vocational
- (3) unclassified

_____ 6. I plan to remain in this school
- (1) less than one year
- (2) one year
- (3) two years

_____ 7. The reason I continued school after high school was
- (1) to satisfy my parents or relatives
- (2) because I was uncertain what else to do
- (3) to satisfy my interest in sports or extracurricular activities
- (4) to see if I could find out what I wanted to do
- (5) to prepare for a definite vocation
- (6) because teachers or counselors suggested it
- (7) because there was nothing else to do

_____ 8. I am enrolled in a community college now because
- (1) I have to make up grade points for a four-year institution
- (2) I want to complete a vocational training program
- (3) I want to complete first two years of college in a school that doesn't have high costs
- (4) I want to complete first two years of college in a small school
- (5) I want to complete first two years of college in a school close to home
- (6) I don't know what else to do

_____ 9. My immediate educational plan is
- (1) undecided
- (2) earn a degree offered by this school
- (3) qualify for transfer to college or university
- (4) earn a proficiency certificate in a vocational field
- (5) complete two years of college to qualify for special military training
- (6) drop out of school and enter military service
- (7) drop out of school and work

_____ 10. With regard to selecting my major field at this time, I am
(1) absolutely certain what I want
(2) reasonably certain what I want
(3) somewhat uncertain what I want
(4) very uncertain what I want

PART III. VOCATIONAL INFORMATION

_____ 11. The occupational area which I plan to enter is
(1) professional (doctors, scientists, engineers, lawyers, architects, teachers, dentists)
(2) office (secretaries, stenographers, bookkeepers, typists)
(3) clerical and sales (store clerks, grocery checkers)
(4) domestic service (maids, cooks)
(5) non-domestic service (waitress, chef, cook, baker, beautician, auto mechanics)
(6) agricultural (animal husbandry, horticulture)
(7) natural resources and conservation (fisheries, forestry)
(8) building construction (carpenters, electricians, sheet metal workers)
(9) government service (state, federal, local offices)
(10) manufacturing, wood (fabrication, production)
(11) manufacturing, metal
(12) heavy equipment operating (power shovel, road grader)
(13) law enforcement (police, sheriff)
(14) health occupations (registered and practical nurses)
(15) electrical, electronic (technicians, radio, t.v.)
(16) farming and agriculture
(17) laborers
(18) arts and crafts
(19) other
(20) undecided

_____ 12. My choice of occupation at the time is
(1) very definite
(2) almost certain
(3) not very definite
(4) undecided

______ 13. In regard to my choice of occupation
- (1) I have thought about this a great deal
- (2) I have thought about this quite a bit
- (3) I have not thought about it very much
- (4) I have not thought about it at all

______ 14. In regard to my choice of occupation
- (1) I deliberated about more than one possibility
- (2) I only considered one occupation
- (3) I have not considered any occupation yet

______ 15. With regard to the work I plan to enter
- (1) I have considerable knowledge of it because I have worked at it
- (2) I have considerable knowledge of it because I have relatives or friends who work at it
- (3) I have a general knowledge but don't know details as yet
- (4) I have read a great deal about it
- (5) I don't know much about it yet
- (6) I have not made up my mind yet

APPENDIX J

DECISION PROJECT
BLUE MOUNTAIN COMMUNITY COLLEGE-PENDLETON, OREGON

INFORMATION INVENTORY

DIRECTIONS: The purpose of this exercise is to determine the most frequently used and most highly regarded sources of information about occupational opportunities. Answer every question. Read each item. Write the appropriate word or words to complete the statement on the blank space provided. If the question asks for information which you do not have, write none on the line.

1. A person may find out about his interests by observing
   ____

2. A person may find out about his mental ability by
   ____

3. A person may find out about his special mechanical, clerical, artistic aptitudes or talents by
   ____

4. A valuable resource book which describes many different occupations, training requirements, employment opportunities is
   ____

5. In most colleges, a person can find a central file of vocational materials in
   ____

6. A book which describes various colleges is
   ____

7. A book which gives information about many vocational schools is
   ____

8. If a person wanted to find information regarding a specific occupation, he would look in
   ____

9. The best place to find the description of a college course at a particular college is in
   ____

10. A good way to find out about requirements for a specific occupation is to
    ____

APPENDIX K

DECISION PROJECT
BLUE MOUNTAIN COMMUNITY COLLEGE–PENDLETON, OREGON

STUDY HABITS INVENTORY

DIRECTIONS: Following is a list of statements concerning study habits. Please indicate the way you act with regard to each item. Indicate what you are in the habit of doing. Answer all questions.

After each statement you will find four columns.

Place a check mark in the column which you feel most nearly describes the way you act now. This is a survey of your present behavior.

PUT ONE CHECK MARK FOR EACH QUESTION.

USE THE FOLLOWING KEY:

Column 1: ALMOST NEVER do I act this way.

Column 2: SOMETIMES I do this.

Column 3: FREQUENTLY I do this.

Column 4: AMOST ALWAYS I do this.

DECISION PROJECT

BLUE MOUNTAIN COMMUNITY COLLEGE–PENDLETON, OREGON

	Almost Never	Sometimes	Frequently	Almost Always
1. Do you average eight hours sleep a night?				
2. Do you get some kind of physical exercise regularly?				
3. Do you have definite periods for recreation?				
4. Do you use a daily schedule?				
5. Do you have a regular place to study?				
6. Do you study during the day?				
7. Do you schedule study close to classtime?				
8. Do you schedule term reports and special projects?				
9. Do you schedule weekly reviews?				
10. Do you schedule social activities to balance study?				
11. Do you allow break time from study?				
12. Do you study when you will be least distracted?				
13. Do you schedule study time from the start of the term?				
14. Do you schedule time for the unexpected?				
15. Do you make a flexible schedule?				
16. Do you follow a schedule?				
17. Do you schedule study time just before class?				
18. Do you schedule daily reviews?				

	Almost Never	Some-times	Fre-quently	Almost Always
19. Do you make a written schedule?				
20. Do you stick to a schedule?				
21. Do you keep your notes in a notebook?				
22. Do you keep plenty of paper on hand?				
23. Do you take notes in ink?				
24. Do you have a system for taking organized notes?				
25. Do you concentrate on the lecture?				
26. Do you write down formulas and equations accurately?				
27. Do you space notes so they are not crowded?				
28. Do you look up things you don't understand?				
29. Do you organize notes so major headings stand out?				
30. Do you keep notes separated by courses?				
31. Do you rewrite or retype notes?				
32. Do you review your notes daily?				
33. Do you review your notes weekly?				
34. Do you underline important points?				
35. Do you know the important points to write down?				

	Almost Never	Some- times	Fre- quently	Almost Always
36. Do you use some kind of shorthand for notes?				
37. Do you avoid doodling on the page of notes?				
38. Do you borrow other students' notes?				
39. Do you have plenty of paper and ink before starting?				
40. Do you take notes from reading assignments?				
41. Do you sit at a desk or table while reading?				
42. Do you choose a place to study without noise?				
43. Do you study subjects that seem hardest for you first?				
44. Do you have a purpose for each assignment?				
45. Do you skim the chapter for an overview first?				
46. Do you review at regular intervals?				
47. Do you keep notes of main ideas from outside reading?				
48. Do you build a list of unfamiliar terms?				
49. Do you take regular breaks when you are reading?				
50. Do you read tables, charts, graphs?				
51. Do you discuss with others what you have just read?				

	Almost Never	Some-times	Fre-quently	Almost Always
52. Do you underline important points as you read?				
53. Do you make notes in the margin of your book?				
54. Do you outline main points of reading assignments?				
55. Do you turn the heading of each section into a question?				
56. Do you try to increase your reading speed?				
57. Do you read the summary before reading the whole assignment?				
58. Do you skim before reading an assignment?				
59. Do you read the preface of a book?				
60. Do you read the Table of Contents before reading a book?				
61. Do you schedule time for writing papers?				
62. Do you limit the topic of a paper?				
63. Do you think of the Title as a question?				
64. Do you make bibliography cards?				
65. Do you include all publication data on cards?				
66. Do you make note cards?				
67. Do you separate your note cards by topics and ideas?				

DECISION PROJECT
BLUE MOUNTAIN COMMUNITY COLLEGE-PENDLETON, OREGON

	Almost Never	Some-times	Fre-quently	Almost Always
68. Do you make an outline before you start to get data?				
69. Do you include introduction, main section, conclusion?				
70. Do you make footnotes?				
71. Do you write a rough draft?				
72. Do you make corrections on the rough draft?				
73. Do you make a bibliography for each paper?				
74. Do you type the final copy?				
75. Do you include a Table of Contents in your paper?				
76. Do you set off major topics in the paper?				
77. Do you proofread final copy?				
78. Do you finish papers a few days before due?				
79. Do you hand in papers on the due date?				
80. Do you give credit where credit is due?				
81. Do you try to figure out in advance the questions?				
82. Do you review periodically during the term?				
83. Do you find out the find of exam you will have?				
84. Do you recite to yourself when going over notes?				
85. Do you make up sample questions?				

	Almost Never	Some-times	Fre-quently	Almost Always
86. Do you review quizzes to find your mistakes?				
87. Do you look over old tests given in a course?				
88. Do you make a master outline of all main points?				
89. Do you write out answers to sample questions?				
90. Do you follow directions exactly?				
91. Do you budget your time during exams?				
92. Do you include introduction, main part, and ending to essay?				
93. Do you check answers before handing in?				
94. Do you answer easiest questions first?				
95. Do you guess if you don't know the answer?				
96. Do you watch for key words like "always"?				
97. Do you leave your first answers on objective tests unchanged?				
98. Do you finish exams in the time allotted?				
99. Do you make an outline before answering essay questions?				
100. Do you read all essay questions before writing?				

APPENDIX L

Table 3. Distribution of Sample by Sex, Age, Grade Level and Treatment

N = 300

	Treatment				
Sample	Reinforcement Counseling Groups N = 72	Simulation Reinforcement Groups N = 45	Self Exploratory Groups N = 43	General Counseling Groups N = 60	Individual Counseling N = 80
Sex					
Male	61	36	35	50	68
Female	11	9	8	10	12
Age					
17	9	1	1	5	1
18	24	18	18	24	32
19	23	14	14	15	25
20	16	12	10	16	22
Grade level					
13	66	39	37	55	75
14	6	6	6	5	5

Table 4. Means and Standard Deviations on Otis Quick Scoring Test by Treatment Groups

Treatment	N	I.Q. Score Mean	I.Q. Score Standard Deviation
Reinforcement Counseling Groups	72	104.15	11.05
Simulation Reinforcement Groups	45	101.25	12.70
Self Exploratory Groups	43	104.30	10.70
General Counseling Groups	60	104.25	11.05
Individual Counseling (control)	80	104.25	12.40

Table 5. Ss' Pre-treatment Vocational Choices by Treatment

Treatment	Vocational Choice			
	Completely Undecided	Somewhat Undecided	Decided	Total
Reinforcement Counseling Group	18	64	0	72
Simulation Reinforcement Group	9	36	0	45
Self Exploratory Counseling Group	9	34	0	43
General Counseling Group	17	43	0	60
Individual Counseling (control)	19	61	0	80

Table 6. Pre-treatment Means and Standard Deviations on Information Inventory by Treatment Condition

Treatment	N	Information Inventory Mean	Information Inventory Standard Deviation
Reinforcement Counseling Group	72	8.20	3.61
Simulation Reinforcement Group	45	8.60	3.58
Self Exploratory Counseling Group	43	9.12	3.54
General Counseling Group	60	8.66	3.63
Individual Counseling Control	80	8.88	3.68

APPENDIX M

Table 7. Means and Standard Deviations for Post-treatment Decision Scores by Treatment Groups

Treatment	N	Decision Scores Mean	Decision Scores Standard Deviation
Reinforcement Counseling Group	72	5.40	2.34
General Counseling Group (Active Control)	60	3.56	2.30
Individual Counseling (Inactive Control)	80	2.93	2.03

Table 8. Analysis of Variance of Decision Scores by Treatment

Source	df	SS	Mean Square	F
Counseling Treatment	2	242.78	121.39	24.66**
Error	209	1028.74	4.92	
Total	211	1271.52		

** $p < .01$

Table 9. Means and Standard Deviations for Occupational Information Scores by Treatment Group

Treatment	N	Occupational Information Scores	
		Mean	Standard Deviation
Reinforcement Counseling Group	72	11.94	2.65
General Counseling Group	60	8.96	2.93
Individual Counseling (Inactive Control)	80	8.98	3.18

Table 10. Analysis of Variance of Occupational Information Scores by Treatment

Source	df	SS	Mean Square	F
Counseling Treatment	2	418.25	209.12	24.12**
Error	209	1812.69	8.67	
Total	211	2230.95		

** $p < .01$

Table 11. Means and Standard Deviations for Decision Scores by Treatment Group

Treatment	N	Decision Scores Mean	Standard Deviation
Simulation-Reinforcement Group	45	6.13	1.23
Reinforcement Counseling Group	72	5.40	2.34
Self Exploratory Group	43	4.60	2.93
General Counseling Group	60	3.56	2.30
Inactive Control	80	2.93	2.03

Table 12. Analysis of Variance for Decision Scores by Treatment

Source	df	SS	Mean Square	F
Counseling Treatment	4	421.96	105.49	27.38**
Error	295	1136.21	3.85	
Total	299	1558.18		

** p < .01

Table 13. Comparisons between Treatment Groups on Mean Decision Scores

Treatments Compared	Mean	Mean Difference	t-value
Simulation Reinforcement	6.13		
Reinforcement Counseling Group	5.40	.73	2.00*
Simulation Reinforcement	6.13		
Self Exploratory Group	4.60	1.53	3.64**
Simulation Reinforcement	6.13		
General Counseling Group	3.56	2.57	6.65**
Simulation Reinforcement	6.13		
Inactive Control	2.93	3.20	8.76**
Reinforcement Counseling Group	5.40		
Self Exploratory Group	4.60	.80	2.11*
Reinforcement Counseling Group	5.40		
General Counseling Group	3.56	1.84	2.35*
Reinforcement Counseling Group	5.40		
Inactive Control	2.93	2.47	7.71**
Self Exploratory Group	4.60		
General Counseling Group	3.56	1.04	2.65**
Self Exploratory Group	4.60		
Inactive Control	2.93	1.67	4.51**
General Counseling Group	3.56		
Inactive Control	2.93	.63	1.85*

* p = < .05
** p = < .01

Table 14. Means and Standard Deviations on Occupational Information Inventory by Treatment Group

Treatment	N	Occupational Information Inventory	
		Mean	Standard Deviation
Simulation-Reinforcement Group	45	11.33	3.80
Reinforcement Counseling Group	72	11.94	2.65
Self Exploratory Group	43	8.62	3.27
General Counseling Group	60	8.96	2.93
Inactive Control	80	8.98	3.18

Table 15. Analysis of Variance of Occupational Information Inventory Scores by Treatment

Source	df	SS	Mean Square	F
Counseling Treatment	4	579.24	144.81	14.73**
Error	295	2898.74	9.82	
Total	299	3477.98		

** $p < .01$

Table 16. Means and Standard Deviations on Edwards Personal Preference Schedule Need-Achievement Scores by Treatment

Treatment	N	Edwards Personal Preference Schedule Mean	Edwards Personal Preference Schedule Standard Deviation
Simulation Reinforcement Group	45	12.71	3.57
Reinforcement Counseling Group	72	13.33	4.45
Self Exploratory Group	43	14.11	3.94
General Counseling Group	60	13.50	3.58
Inactive Control	80	13.63	4.11

Table 17. Analysis of Variance of Edwards Personal Preference Schedule Need Achievement Scores by Treatment

Source	df	SS	Mean Square	F
Counseling Treatment	4	47.51	11.87	0.74
Error	295	4719.15	15.99	
Total	299	4766.66		

Table 18. Means and Standard Deviations of Q-sort Index of Similarity Scores by Treatment Group

Treatment	N	Index of Similarity Scores Mean	Index of Similarity Scores Standard Deviation
Simulation Reinforcement Group	45	39.53	6.51
Reinforcement Counseling Groups	72	39.56	14.51
Self Exploratory Group	43	36.14	12.32
General Counseling Group	60	33.76	14.05
Inactive Control	80	33.15	12.64

Table 19. Analysis of Variance of Q-sort Index of Similarity Scores by Treatment

Source	df	SS	Mean Square	F
Counseling Treatment	4	2417.05	604.26	3.75**
Error	295	47500.94	161.02	
Total	299	49918.00		

** p = < .01

Table 20. Comparisons between Treatment Groups on Mean Scores of California Q-Sort Index of Similarity Scores

Treatments Compared	N	Mean	Mean Difference	t-value
Simulation-Reinforcement	45	39.53		
Reinforcement Group Counseling	72	39.56	.03	.01
Simulation Reinforcement	45	39.53		
Self Exploratory Groups	43	36.14	3.39	1.25
Simulation Reinforcement	45	39.53		
General Counseling Groups	60	33.76	5.76	2.30*
Simulation Reinforcement	45	39.53		
Inactive Control	80	33.15	6.38	2.70**
Reinforcement Counseling Group	72	39.56		
Self Exploratory Group	43	36.14	3.42	1.40
Reinforcement Counseling Group	72	39.56		
General Counseling Group	60	33.76	5.80	2.12*
Reinforcement Counseling Group	72	39.56		
Inactive Control	80	33.15	6.41	3.12**
Self Exploratory Groups	43	36.14		
General Counseling Group	60	33.76	2.38	.94
Self Exploratory Groups	43	36.14		
Inactive Control	80	33.15	2.99	1.25
General Counseling Groups	60	33.76		
Inactive Control	80	33.15	.61	.28

* $p < .05$
** $p < .01$

Table 21. Pre- and Post-Treatment Means and Standard Deviations for Cooperative English Battery and Study Habits Inventory

Criterion Test	Pre-Treatment		Post-Treatment		Mean Change
	Mean	Standard Deviation	Mean	Standard Deviation	
Cooperative English Test Battery	152.22	7.65	152.02	6.99	.20
Study Habits Inventory	155.05	30.30	190.15	35.11	35.10***

*** p < .001

OE 6000 (REV. 9-68)

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION

ERIC REPORT RESUME

(TOP)

ERIC ACCESSION NO.

CLEARINGHOUSE ACCESSION NUMBER

RESUME DATE 2-28-68

P.A.

T.A.

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TITLE Effect of an Integrated Instructional Counseling Program to Improve Vocational Decision Making of Community College Youth

PERSONAL AUTHOR(S) T. A. Ryan

INSTITUTION (SOURCE) Oregon State University, Corvallis, Oregon, School of Education

SOURCE CODE

REPORT/SERIES NO.

OTHER SOURCE

SOURCE CODE

OTHER REPORT NO.

OTHER SOURCE

SOURCE CODE

OTHER REPORT NO.

PUB'L. DATE 2-28-68

CONTRACT/GRANT NUMBER HRD 413-65 5-0154 6-85-065

PAGINATION, ETC.

RETRIEVAL TERMS counseling, behavioral; counseling, group; guidance, occupational; vocational counseling; community college

IDENTIFIERS

ABSTRACT

This study was concerned with evaluating a planned vocational guidance program with instructional and counseling components in a community college setting. Primary purpose of the program was to improve occupational choice-making of post high school youth. The investigation tested effects of reinforcement group counseling techniques on vocational decision making and evaluated simulation materials for vocational guidance of community college youth. Regular counseling staff implemented counseling role in the study. Reinforcement counseling and simulation materials were primary independent variables. Vocational decision making and knowledge of sources of personal data and occupational information were major dependent variables. A posttest control group design was implemented including active and inactive control groups, with Ss assigned randomly to treatment conditions. Analysis of variance was used to test major hypotheses. Control over learning variables and initial level of Ss' vocational decision making was achieved by restricting population to students scoring below 50th percentile on scholastic entrance tests, enrolling all Ss in a common core program, and restricting population to students lacking firm vocational plans. Results supported major hypotheses. Reinforcement counseling techniques and simulation materials were found to be effective for improving students' vocational decision making and increasing their knowledge of sources of occupational information. The vocational guidance program found to be most effective implemented reinforcement counseling techniques and simulation materials in an integrated instruction-guidance approach.